



U.S. Department of Transportation

National Highway Traffic Safety Administration

#### Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

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## **CASE SUMMARY**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

PSU <u>45</u>

CASE NO. \_\_\_121F\_

TYPE OF ACCIDENT Car/Car/Car - Rear to Front

# A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES

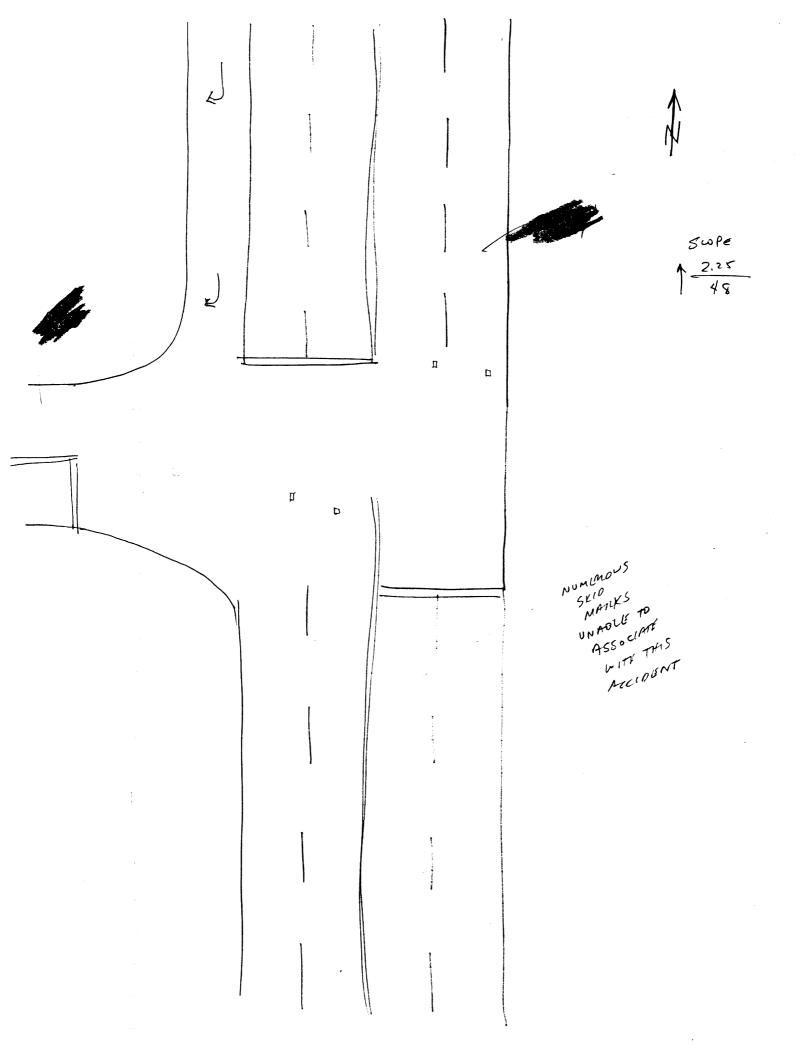
(Provide a summary of the accident sequence as well as any particular event of the accident that is noteworthy. Injury mechanism and vehicle crashworthiness is the focus, not driver culpability. **Do not include any personal identifiers.** Use reverse side if needed.)

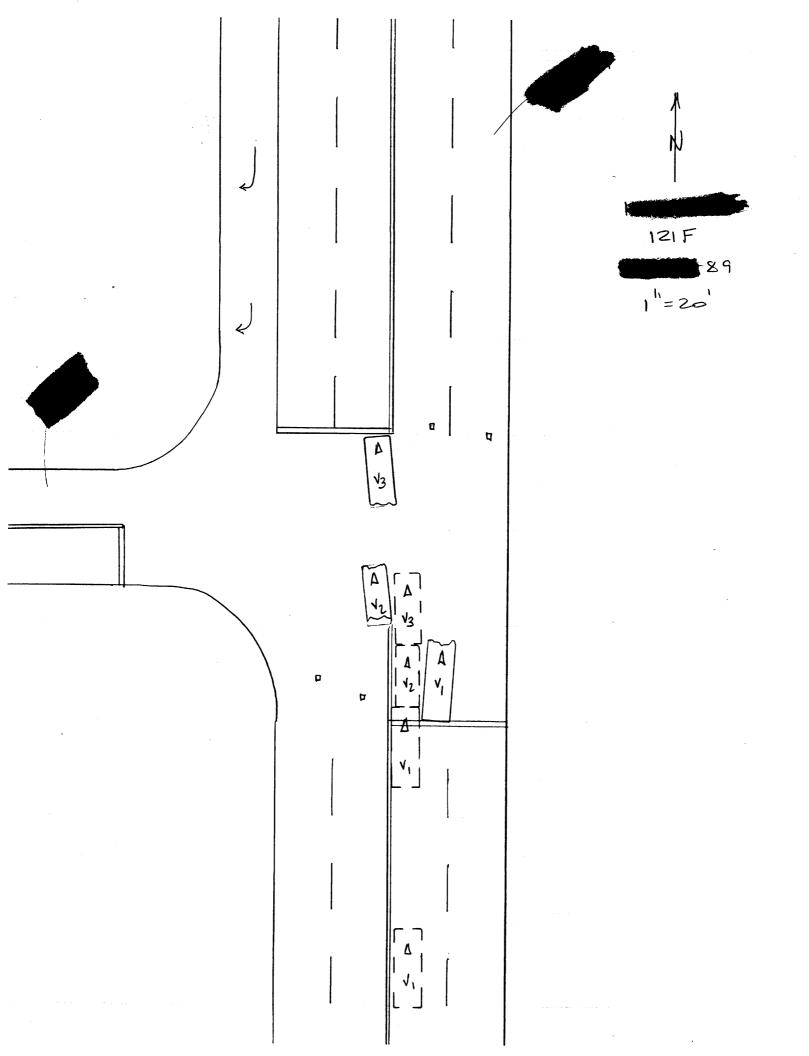
Vehicle #3 was stopped, preparing to turn left across two lanes of traffic on a four lane highway. Vehicle #2 was stopped behind Vehicle #3. Vehicle #1 came up behind Vehicle #2 but couldn't stop and contacted Vehicle #2 in the rear. This forced Vehicle #2 to contact the rear of Vehicle #3.

	B. VEHICLE PROFILE(S)							
Vehicle	Class		Most Seve	ere Damage				
No.	of Vehicle	7547711164671116461		Severity Description	Component Failure			
1	Full Size	1971 Ford Torino Wagon	Front	Moderate	None			
2	Subcompact	1987 Ford Tempo	Back	Severe	None			
3	Intermediate	1985 Lincoln Mark VII	Back	Moderate	None			

C. PERSON PROFILE(S)								
Vehicle	Person	Seat	Restraint	Restraint Most Severe Injury				
No.	Role	Position	Use	Body R	egion	Lesion	AIS	Injury Source
1	Driver	Front Left	None	Face		Contusion	1	Windshield
1	Pas-	Front	None	Face		Contusion	1	Windshield
2	senger Driver	Right Front Left	None	Face	Unke	Lacenton	(	winisheld
3	Dri∨er	Front Left	Lap & Shoulder	-	Not	Injured		
3	Pas- senger	Front Right	Lap & Shoulder		Not	Injured		
3	Pas- senger	Back Right	None		Not	Injured		
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l								1

DO NOT SANITIZE THIS FORM







U.S. Department of Transportation

National Highway Traffic Safety
Administration

# ACCIDENT COLLISION MEASUREMENT TABLE

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

Primary Sampling Unit Number <u>45</u> 121 Case Number - Stratum **ACCIDENT COLLISION DIAGRAM** LEVEL 1 LEVEL II (Cont'd) **CRASH DATA** PHYSICAL EVIDENCE ABSENT accomplished when physical evidence is present: VEH. #1 VEH. #2 ÆH. #3 To be accomplished when there is no physical evidence present at the scene: \*document reference point and reference line relative to physical features present \*approximate vehicle orientation at at the scene Heading Angle impact and final rest \*scaled documentation of all accident \*applicable road/roadway delineation induced physical evidence (e.g., curbs/edge lines, lane markings, Surface Type median markings, pavement markings, \*scaled documentation of all roadside objects contacted Surface \*applicable traffic controls (e.g., speed \*roadway surface type and condition of Condition limit) applicable roadways Grade \*north arrow placed on diagram \*grade measurements for all applicable Measurement roadways (v/h) "sketch required \*scaled representations of the vehicle(s) LEVEL II at pre-impact, impact, and final rest PHYSICAL EVIDENCE PRESENT based upon either: a) physical evidence, or In addition to the Level I tasks noted above, the following must be b) reconstructed accident dynamics Reference Point: \_\_\_\_ Reference Line: \_\_\_ Distance and Direction Distance and Direction Item from Reference Point from Reference Line NO PHYSICAL EVIDENCE •

ltem	Distance and Direction from Reference Point	Distance and Direction from Reference Line
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	·	

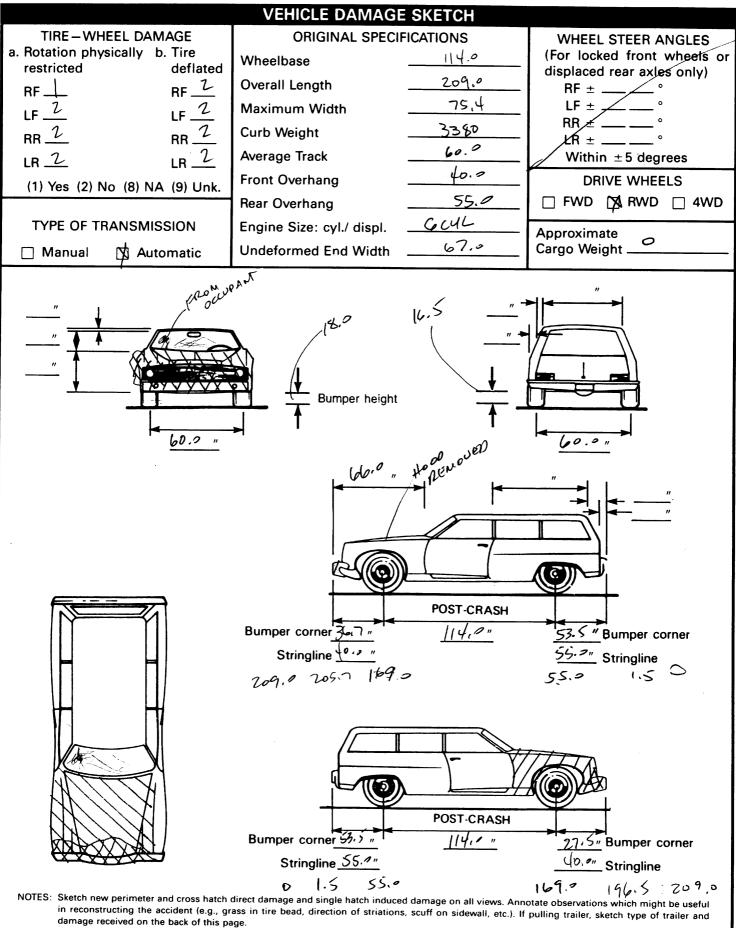


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# **EXTERIOR VEHICLE FORM**

NATIONAL ACCIDENT SAMPLING SYSTEM

National High Administration	way Traffic Safet า	у						147	CRAS		INESS DA		_
1. Primary	Sampling U	nit Nun	nber	45	3. \	Vehicle <b>f</b>	Number						
2. Case No	umber – Strat	um		21 F									
				VEHICLE	IDENT	IFICAT	ION						
VIN E	1A4	2 H						_ Mode	l Year <sub>-</sub>	197	7 /		
Vehicle Ma	ke (specify): .	F	ens			Vehic	le Mode	el (speci	fy): _73	nino	WAGO	2 <b>~</b> !	
				L	OCAT	OR					*		
	end of the d				hicle lo	ngitudir	nal cente	er line o	r bump	er corn	er for er	ıd	
Specific Ir				of Direct Da	mage				Locatio	n of Fie	ld L		
/		SEGINS	5 11.3 Fm	LOM LIF.	ره ۱۱۸	N.	En	TIRE	FWN	AC PL	ANE		
			<del></del>										
			•		SH PR								
NOTES: Id	entify the pla II, etc.) and la	ne at w bel adj	hich the C- ustments (e	measuremes.g., free sp	ents are ace).	e taken (	e.g., at	bumper	, above	bumpe	r, at sill,	above	9
η M im													
th si	ee space value individual ( e individual ( de taper, etc. se as many li	C location Record	ons. This m the value f	ay include or each C-r	the foll neasure	owing: ement a	bumper nd max	lead, b imum c	umper t rush.	body co aper, si	ontour ta de proti	aken a usion,	t,
Specific			Direct D										ᅦ
Impact Number	Plane o C-Measurer		Width (CDC)	Max Crush	Field L	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	± D	
1	FILONTBU	MAR	60.0		70.8	3.3	8.6	11.3	11.7	11.6	15.2	0	
/						0	2,5	1.5	1.5		0	٥	
				125		3.3	6.1	9.8	10,2	9.1	12.5	0	
<del>/</del>													_
1	1222 11 1	1200 +				1/ .		2.0					4
	APPROXIMA	rie Di	AMAGE			4.0	11.0		23.0		21.0 0	<del></del>	$\dashv$
				21.5		4.0		18.5					$\dashv$
	MEASURE	MEMEN	TS ARE		FUR								ᅥ
	pullen	From	H BUM	pony	GRIL	C 60	1 42	30U T	/ /	001	IN	<u>'</u>	
	oroen t	DP	re part	- UZ HIC	e 7	on c	THEIN	CS R	es us	JAC			$\exists$
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Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CDC W	ORKSHEET
CODES FOR O	BJECT CONTACTED
01-30 – Vehicle Number  Noncollision (31) Overturn – rollover (32) Fire or explosion (33) Jackknife (34) Other intraunit damage (specify):  (35) Noncollision injury	(57) Fence (58) Wall (59) Building (60) Ditch or Culvert (61) Ground (62) Fire hydrant (63) Curb (64) Bridge
(38) Other noncollision (specify):	(68) Other fixed object (specify):  (69) Unknown fixed object
<ul> <li>(39) Noncollision – details unknown</li> <li>Collision with Fixed Object</li> <li>(41) Tree (≤4 inches in diameter)</li> <li>(42) Tree (&gt;4 inches in diameter)</li> <li>(43) Shrubbery or bush</li> <li>(44) Embankment</li> </ul>	Collision With Nonfixed Object (71) Motor vehicle not in transport (72) Pedestrian (73) Cyclist or cycle (74) Other nonmotorist or conveyance (specify):
<ul> <li>(45) Breakaway pole or post (any diameter)</li> <li>Nonbreakaway Pole or Post</li> <li>(50) Pole or post (≤4 inches in diameter)</li> <li>(51) Pole or post (&gt;4 but ≤12 inches in diameter)</li> <li>(52) Pole or post (&gt;12 inches in diameter)</li> <li>(53) Pole or post (diameter unknown)</li> </ul>	(75) Vehicle occupant (76) Animal (77) Train (78) Trailer, disconnected in transport (88) Other nonfixed object (specify):
(54) Concrete traffic barrier (55) Impact attenuator	(98) Other event (specify):
(56) Other traffic barrier (specify):	(99) Unknown event or object

# DEFORMATION CLASSIFICATION BY EVENT NUMBER

ł								
Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01	02	000	00	F	D	E	w	07
			-	-			•	
						-		
· ——								
	<del></del>			-				
					-			
						<del></del>		-
				. ·	<u>.</u>		· — ,	

# **INTERIOR VEHICLE FORM**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

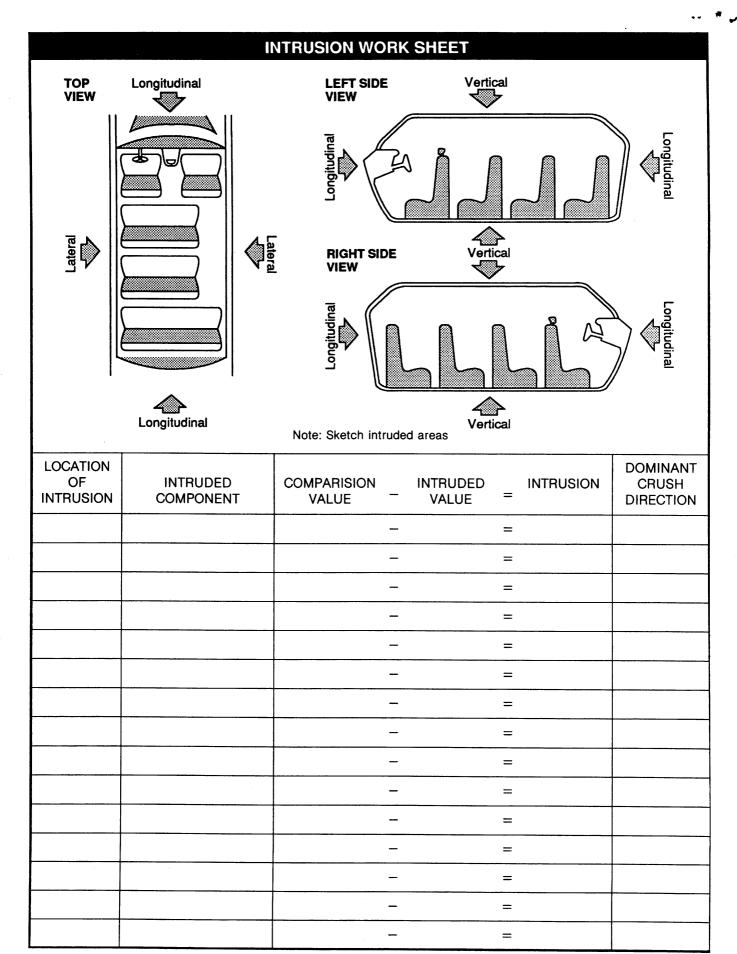


Administration

	GLAZING
1. Primary Sampling Unit Number $45$	Glazing Damage from Impact Forces
2. Case Number – Stratum	
z. Case Number – Stratum	15.WS $\stackrel{\frown}{=}$ 16. LF $\stackrel{\frown}{=}$ 17. RF $\stackrel{\frown}{=}$ 18. LR $\stackrel{\frown}{=}$ 19. RR $\stackrel{\frown}{=}$
3. Vehicle NumberO	20. BL 🗘 21. Roof 🔏 22. Other 💪
INTEGRITY	(0) No glazing damage from impact forces
4. Passenger Compartment Integrity	(2) Glazing in place and cracked from impact forces (3) Glazing in place and holed from impact forces
(00) No integrity loss	(4) Glazing out-of-place (cracked or not) and not holed from impact forces
	(5) Glazing out-of-place and holed from impact forces
Yes, Integrity Was Lost Through (01) Windshield	(6) Glazing disintegrated from impact forces (7) Glazing removed prior to accident
(02) Door (side)	(8) No glazing
(03) Door/hatch (rear)	(9) Unknown if damaged
(04) Roof (05) Roof glass	Glazing Damage from Occupant Contact
(06) Side window (07) Rear window	23. WS Z 24. LF 225. RF 2 26. LR 2 27. RR 2
(08) Roof and roof glass (09) Windshield and door (side)	28. BL 📿 29. Roof 📿 30. Other Ć
(10) Windshield and roof	(0) No occupant contact to glazing or no glazing
(11) Side and rear window (98) Other combination of above (specify):	(1) Glazing contacted by occupant but no glazing damage
	(2) Glazing in place and cracked by occupant contact (3) Glazing in place and holed by occupant contact
(99) Unknown	(4) Glazing out-of-place (cracked or not) by occupant
	contact and not holed by occupant contact
Door, Tailgate Or Hatch Opening	(5) Glazing out-of-place by occupant contact and holed by occupant contact
5. LF 6. RF 7. LR 8. RR 9. TG/H	(6) Glazing disintegrated by occupant contact (9) Unknown if contacted by occupant
(0) No door/gate/hatch	If No Glazing Damage And No Occupant Contact or No
(1) Door/gate/hatch remained closed and operational (2) Door/gate/hatch came open during collision	Glazing, Then Code IV 31 Through IV 46 As 0
(3) Door/gate/hatch jammed shut	_
(8) Other (specify):	Type of Window/Windshield Glazing
	31. WS32. LF33. RF 34. LR35. RR
(9) Unknown	36. BL <u>O</u> 37. Roof <u>D</u> 38. Other <u>O</u>
Damage/Failure Associated with Door, Tailgate or Hatch	(0) No glazing contact and no damage, or no glazing
Opening in Collision. If IV05-IV09 ≠ 2, Then Code 6.	(1) AS-1 — Laminated (2) AS-2 — Tempered
10. LF 2 11. RF 2 12. LR 2 13. RR 2 14. TG/H 2	(3) AS-3 — Tempered (3) AS-3 — Tempered-tinted
10. LF 2 11. RF 2 12. LR 3 13. RR 3 14. TG/H	(4) AS-14 — Glass/Plastic
(0) No door/gate/hatch or door not opened	(8) Other (specify):
Door, Tailgate, or Hatch Came Open During Collision	(9) Unknown
(1) Door operational (no damage)	Window Precrash Glazing Status
(2) Latch/striker failure due to damage (3) Hinge failure due to damage	
(4) Door structure failure due to damage	39.WS 40. LF 41. RF 12 42. LR 2 43. RR 2
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage	44. BL 2 45. Roof 0 46. Other D
(6) Latch/striker and hinge failure due to	(0) No glazing contact and no damage, or no glazing
damage	(1) Fixed
(8) Other failure (specify):	(2) Closed
(9) Unknown	(3) Partially opened (4) Fully opened

(9) Unknown

(9) Unknown



			OCCU	PANT ARE	A INTRUSION
Note	: If no intrusi	ons, leave var	riables IV 47-I	V 86 blank.	INTRUDING COM
-	Location of		Magnitude of Intrusion	Dominant Crush	Interior Compone (01) Steering as (02) Instrument
1st			49	50	(03) Instrument (04) Instrument (05) Toe pan
2nd	51	52	53	54	(06) A-pillar (07) B-pillar
3rd	55	56	57	58	(08) C-pillar (09) D-pillar (10) Door panel
4th	59	60	61	62	(12) Roof (or co (13) Roof side r (14) Windshield
5th	63	64	<b>6</b> 5	66	(15) Windshield (16) Window fra (17) Floor pan
6th	67	68	69	70	(18) Backlight h (19) Front seat I (20) Second sea
7th	71	72	73	74	(21) Third seat I (22) Fourth seat (23) Fifth seat b
8th	75	76	77	78	(24) Seat cushic (25) Back panel
9th	79	80	81	82	(26) Other interi
10th	83	84	85	86	(28) Side panel
LOC	ATION OF IN	TRUSION	NONE		Exterior Compone (30) Hood (31) Outside sur
	(11) Left (12) Middle (13) Right	e			(32) Other exter (specify):
	Second Seat				(33) Unknown e
	(21) Left (22) Middle (23) Right	е			(98) Intrusion of (specify):
	Third Seat (31) Left (32) Middle (33) Right	е			(99) Unknown  MAGNITUDE OF I  (1) ≥ 1 inch but  (2) ≥ 3 inches b
	Fourth Seat (41) Left (42) Middle (43) Right				(3) ≥ 6 inches b (4) ≥ 12 inches (5) ≥ 18 inches (6) ≥ 24 inches (9) Unknown
	(98) Other (99) Unkno	enclosed area	a (specify):		DOMINANT CRUS (1) Vertical (2) Longitudinal

#### **MPONENT**

#### ents

- assembly
- it panel left
- it panel center
- it panel right
- onvertible top)
- rail
- d header
- rame
- header
- back
- at back
- back
- at back
- back
- on
- or door surface
- rior component (specify):
- forward of the A-pillar
- rear of the A-pillar

#### ents

- irface of vehicle (specify):
- rior object in the environment
- exterior object
- of unlisted component(s)

#### **INTRUSION**

- it < 3 inches
- but < 6 inches
- but < 12 inches
- but < 18 inches
- but < 24 inches

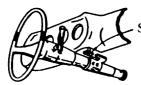
### SH DIRECTION

- (2) Longitudinal
- (3) Lateral
- (9) Unknown

# STEERING COLUMN WORKING DIAGRAMS

STEERING COLUMN COLLAPSE

Steering Column Shear Module Movement

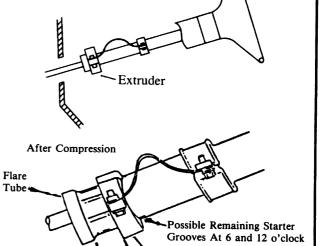


SHEAR CAPSULE



Right V =\_\_\_\_\_\_,

Direction and Magnitude of Steering Column Movement

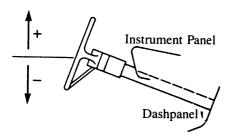


Compression = Measurement A

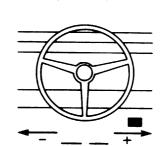
A =\_\_\_\_

### STEERING COLUMN MOVEMENT

Vertical Movement

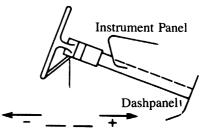


Lateral Movement



Longitudinal Movement

Extruder

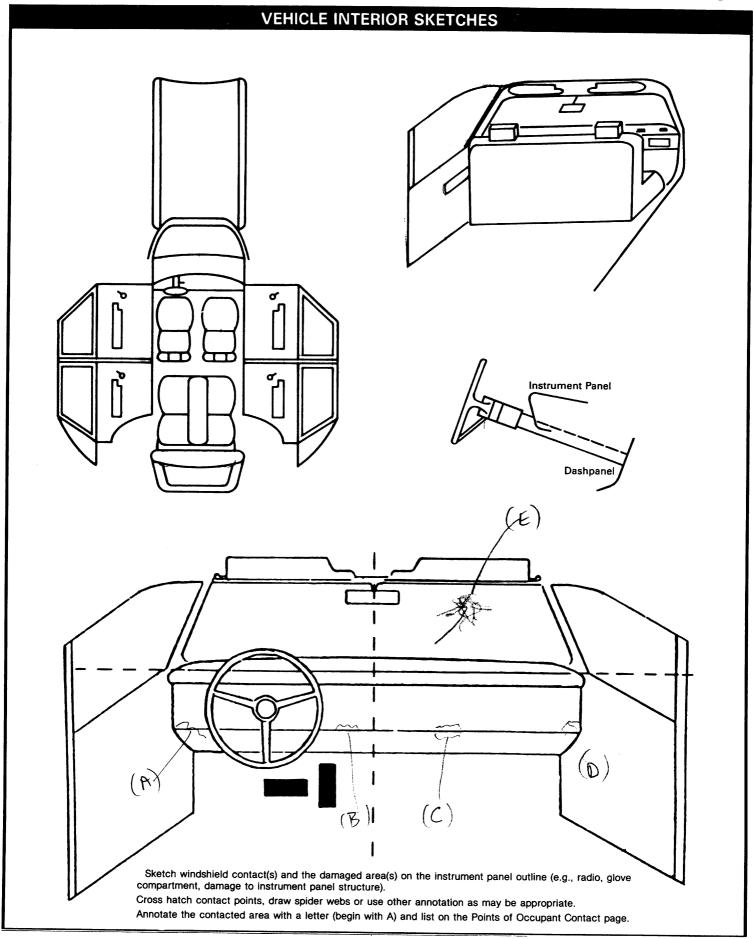


	COMPARISON VALUE		DAMAGED VALUE	=	MOVEMENT
VERTICAL				=	
LATERAL		_		=	
LONGITUDINAL		_		=	

#### STEERING RIM/SPOKE DEFORMATION

COMPARISON VALUE	_	DAMAGED VALUE	=	DEFORMATION
			=	
	_		=	

OTERDING CO	90
STEERING COLUMN .	92. Steering Rim/Spoke Deformation
87. Steering Column Type	Code actual measured
(1) Fixed column	deformation to the nearest inch.
(2) Tilt column	(0) No steering rim deformation
(3) Telescoping column	(1-5) Actual measured value
(4) Tilt and telescoping column	(6) 6 inches or more
(8) Other column type (specify):	(8) Observed deformation cannot be measured
The second of th	(9) Unknown
(9) Unknown	93. Location of Steering Rim/Spoke
If PDOF ≠ 11, 12 or 1, Then Code IV88-IV91 As 96	Deformation
88. Steering Column Collapse Due to	(00) No steering rim deformation
Occupant Loading Occupant Loading	Quarter Sections
Code actual measured movement	(01) Section A
to the nearest inch. See coding manual	(02) Section B
for measurement technique(s).	(03) Section C
(00) No movement, compression, or	(04) Section D
collapse	٠,
(01-49) Actual measured value	Half Sections
(50) 50 inches or greater	(05) Upper half of rim/spoke
Entiment of the second	(06) Lower half of rim/spoke Upper
Estimated movement from observation (81) Less than 1 inch	(07) Left half of rim/spoke
(82) ≥ 1 inch but < 2 inches	(08) Right half of rim/spoke
(83) ≥ 2 inches but < 4 inches	(09) Complete steering wheel sellers
(84) ≥ 4 inches but < 6 inches	(09) Complete steering wheel collapse (10) Undetermined location
(85) ≥ 6 inches but < 8 inches	(99) Unknown
(86) Greater than or equal to 8 inches	
(96) Not assessed (PDOF ≠ 11, 12, 1)	INSTRUMENT PANEL
(97) Apparent movement, value	94. Odometer Reading <u>9 9 1 000</u>
undetermined or cannot	9/204 miles - Code mileage to the
be measured or estimated	nearest 1,000 miles
(98) Nonspecified type column (99) Unknown	(000) No odometer
(33) Chkhown	(001) Less than 1,500 miles
Direction And Magnitude of Steering	(300) 299,500 miles or more
Column Movement	(999) Unknown
89 Vertical Movement + 00	Source:
89. Vertical Movement	
	95. Instrument Panel Damage from
90. Lateral Movement	Occupant Contact
	(0) No.
+ ^ 4	(1) Yes (9) Unknown
91. Longitudinal Movement	(5) CHRIOWII
Code the actual measured movement	96. Knee Bolsters Deformed from
to the nearest inch. See Coding Manual	Occupant Contact
for measurement technique(s)	(0) No
(+00) No Steering column movement	(1) Yes
(±01-±49) Actual measured value	(8) Not present
(±50) 50 inches or greater	(9) Unknown
Estimated movement from observation	97. Did Glove Compartment Door Open
(±81) ≥ 1 inch but < 3 inches	During Collision(s)
(±82) ≥ 3 inches but < 6 inches	(0) No
(±83) ≥ 6 inches but < 12 inches	(1) Yes
(±84) ≥ 12 inches	(8) Not present
(96) Not assessed (PDOF ≠ 11, 12, 1)	(9) Unknown
(97) Apparent movement > 1 inch but	· · · · · · · · · · · · · · · · · · ·
cannot be measured or estimated (99) Unknown	



National Accident Sampling System - Crashworthiness Data System: Interior Vehicle Form							
		POINT	S OF OCCU	PANT CONTA	СТ		
Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supportin	og Physical Evidance	Confidence Level of Contact	
A	09		L)KNEE		ng Physical Evidence	Point	
В	10	1	B) KNEE	BENT PAN		<del>                                     </del>	
С	10	2	P) KNCE	10 .1	.)	!	
D	111	2	K)KYEE	v 11	-		
E	01	2	FACE	·	LASS & SMUDGE	<del>                                     </del>	
F			1,	CO COLOR	Grs 3 , SMUDGE		
G							
Н							
1							
J							
K							
L							
M							
N							
		CODE	S FOR INTERIO	R COMPONENTS			
(06) Steering codes 04 (07) Steering selector I (08) Add on e deck, air (09) Left instr (10) Center in (11) Right instr (12) Glove cor (13) Knee bols (14) Windshie of the fol pillar, instruction (15) Windshie of the fol pillar, instruction (passenge (15) Windshie (15)	wheel rim wheel hub/spoke wheel (combination and 05) column, transmissic lever, other attachme equipment (e.g., CB, conditioner) rument panel and be astrument panel and be mpartment door	(27) of RIGHT on (30) ent tape (31) (32) elow (33) below (34) below elow (35) more (36) r, A- or,or e only) more (37) r, A- irror INTERIC (40)	or roof side rail Other left side o  SIDE Right side interior excluding hardw Right side hardw Right A pillar Right B pillar Other right pillar  Right side windo one or more of t frame, window s or roof side rail Other right side	the following: sill, A-pillar, B-pillar, bject (specify):  or surface, sare or armrests vare or armrest  ow glass or frame ow glass including he following: ill, A-pillar, B-pillar, object (specify):	(49) Other interior object (49) Other interior object (50) Front header (51) Rear header (52) Roof left side rail (53) Roof right side rail (54) Roof or convertible to (57) Floor or console mou transmission lever, inconsole (58) Parking brake handle (59) Foot controls includin brake  REAR (60) Backlight (rear window (61) Backlight storage rack (62) Other rear object (specifications)	(specify):  op  an nted cluding og parking w) c, door, etc.	
hardware (21) Left side I (22) Left A pill (23) Left B pill (24) Other left		(41) (42) luding (43) t (44) (45) (46)	Belt restraint wel Belt restraint B-p point	bbing/buckle illar attachment /stem component stem (specify):	CONFIDENCE LEVEL CONTACT POINT (1) Certain (2) Probable (3) Possible (4) Unknown		

Λ	П		w	$\Lambda$	57	Б	ES'		Λ	11	6.7	7
/=	Ų.	V.	4 L'	17£	46	1	-	11 6	/ A \	HN		7

NOTES: Encode the data for each applicable front seat position. The attributes for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
F	Availability			
Ŕ	Function			
o T	Failure			

Automatic	(Passive)	Restraint S	ystem Availa	bility
-----------	-----------	-------------	--------------	--------

- (0) Not equipped/not available
- (1) Airbag
- (2) Airbag disconnected (specify):
- (3) Airbag not reinstalled
- (4) 2 point automatic belts
- (5) 3 point automatic belts
- (6) Automatic belts destroyed or rendered inoperative
- (9) Unknown

#### **Automatic (Passive) Restraint Function**

(0) Not equipped/not available

#### **Automatic Belt**

- (1) Automatic belt in use
- (2) Automatic belt not in use
- (3) Automatic belt use unknown

#### Air Bag

- (4) Airbag deployed during accident
- (5) Airbag deployed inadvertently just
- prior to accident
  (6) Deployed, accident sequence undetermined
- (7) Nondeployed
- (8) Unknown if deployed
- (9) Unknown

## **Did Automatic (Passive) Restraint Fail**

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_
- (9) Unknown

### **MANUAL RESTRAINTS**

NOTES: Encode the applicable data **for each seat position** in the vehicle. The attributes for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
F - RST	Availability	3	3	3
	Use	00	00	00
	Failure Modes	0	0	0
OZOOEO	Availability	3	3	3
	Use	00	00	00
N D	Failure Modes	D	0	0
T H	Availability			
- 1	Use			
R D	Failure Modes			
O T	Availability			
	Use			
H E R	Failure Modes			

Manual (Active) Belt System Availability	(08) Other belt used (specify):
<ul> <li>(0) Not available</li> <li>(1) Belt removed/destroyed</li> <li>(2) Shoulder belt</li> <li>(3) Lap belt</li> <li>(4) Lap and shoulder belt</li> <li>(5) Belt available — type unknown</li> <li>(8) Other belt (specify):</li> </ul>	(12) Shoulder belt used with child safety seat (13) Lap belt used with child safety seat (14) Lap and shoulder belt used with child safety seat (15) Belt used with child safety seat — type unknown (18) Other belt used with child safety seat (specify):
(9) Unknown	(99) Unknown if belt used
Manual (Active) Belt System Use	Manual (Active) Belt Failure Modes During Accident
<ul><li>(00) None used, not available, or belt removed/destroyed</li><li>(01) Inoperative (specify):</li></ul>	<ul> <li>(0) No manual belt used or not available</li> <li>(1) No manual belt failure(s)</li> <li>(2) Manual belt failure(s) (encode all that apply above)</li> <li>[A] Torn webbing (stretched webbing not included)</li> <li>[B] Broken buckle or latchplate</li> <li>[C] Upper anchorage separated</li> </ul>
(02) Shoulder belt (03) Lap belt (04) Lap and shoulder belt (05) Belt used — type unknown	[D] Other achorage separated (specify):  [E] Broken retractor
	[F] Other manual belt failure (specify):  (9) Unknown

	CHILD SAFETY SEA	r fieli	D ASSES	SMENT			
When a child safety seat is posterior to below the occupant's number to	resent enter the occupa	nt's nu	mher in th	a first row o	nd complete t ch child safety s	he column seat present.	
Occupant Number							
Type of Child     Safety Seat							
2. Child Safety Seat Orientation							
3. Child Safety Seat Harness Usage							
4. Child Safety Seat Shield Usage							
<ol><li>Child Safety Seat Tether Usage</li></ol>							
6. Child Safety Seat Make/Model	Spe	cify Bel	ow for Eac	h Child Safe	ty Seat		
1. Type of Child Safety Seat  (0) No child safety seat (1) Infant seat (2) Toddler seat (3) Convertible seat (4) Booster seat (7) Other type child safety se (8) Unknown child safety se (9) Unknown if child safety se (9) Unknown if child safety se 2. Child Safety Seat Orientation (00) No child safety seat Designed for Rear Facing for (01) Rear facing (02) Forward facing (03) Other orientation (speci	at type seat used n r This Age/Weight	4. C 5. C N () () () () () () ()	child Safety child Safety lote: Option 00) No child lot Designe 01) After m added, 02) After m 03) Child sa harness 09) Unknow added of esigned wi 1) Harness 2) Harness	d safety sear ed with Harn narket harnes not used narket harnes afety seat us s/shield/tethe ith Harness/s s/shield/tethe s/shield/tethe	Usage  Usage  Usage  Used for Variates/Shield/Tether  Uses/Shield/tether  Uses/Shield/Tether	her r r used er market	
(04) Unknown orientation  Designed for Forward Facing for This Age/Weight (11) Rear facing (12) Forward facing (18) Other orientation (specify):			Unknown if Designed with Harness/Shield/Tether				
(19) Unknown orientation  Unknown Design or Orientat  Weight, or Unknown Age/We  (21) Rear facing  (22) Forward facing  (28) Other orientation (specif	eight			Seat Make/ ke/model an	Model d occupant nui	mber)	
(29) Unknown orientation	spet used	_				·	

# **HEAD RESTRAINTS/SEAT EVALUATION**

NOTES: Encode the applicable data for **each seat position** in the vehicle. The attributes for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
F	Head Restraint Type/Damage	3	0	3
R S T	Seat Type	03	03	03
	Seat Performance		1	1
SECON	Head Restraint Type/Damage	0	0	0
Ö	Seat Type	0 5	05	05
20	Seat Performance	1	1	)
ΤH	Head Restraint Type/Damage			
- 1	Seat Type			
R D	Seat Performance			
O T	Head Restraint Type/Damage			
H E R	Seat Type			
Ŕ	Seat Performance			

Seat Performance			
t Position			on)
egral — no damage egral — damaged during accident ljustable — no damage ljustable — damaged during accident ld-on — no damage ld-on — damaged during accident her (specify):	(1) No sea (2) Seat pont (Encoder [A] Sea [B] Sea [C] Sea [D] Sea [E] Deriver [F] Deriver [G] Deriver [H] Deriver [H] Deriver [H] Deriver [H] Sea [L]	at performance failure(s) performance failure(s) de all that apply) per adjusters failed per back folding locks failed per tracks failed per anchors failed performed by impact of passer formed by own inertial force performed by passenger comp	nger from front ces
olit bench with folding back(s)	 [I] Oth	ner (specify):	
ther seat type (specify):nknown			
IBE ANY INDICATION OF ABNORMAL CT PATTERN)	. OCCUPANT POSTURE	(I.E. UNUSUAL OCCL	JPANT
	ctraint Type/Damage by Occupant at This it Position  In head restraints  It progration  It provides the provided the provi	straint Type/Damage by Occupant at This t Position  In head restraints  In head restra	straint Type/Damage by Occupant at This t Position  It head restraints It he head adjusters failed It head restraints (Encode all that apply) It head adjusters failed It head restraints (Encode all that apply) It head adjusters failed It head restraints (Encode all that apply) It head adjusters failed It head restraints (Encode all that apply) It head adjusters failed It head restraints (Encode all that apply) It head adjusters failed It head restraints (Encode all that apply) It head adjusters failed It head adjusters failed It head restraints (Encode all that apply) It head adjusters failed It head restraints (Encode all that apply) It head adjusters failed It hea

# **EJECTION/ENTRAPMENT DATA** Complete the following if the researcher has any indications that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form. **EJECTION** No [**⋈**] Yes [ ] Describe indications of ejection and body parts involved in partial ejection(s): Occupant Number Ejection **Ejection Area Ejection Medium** Medium Status **Ejection** (7) Roof (5) Integral structure (1) Complete ejection (8) Other area (e.g., back of (8) Other medium (specify): (2) Partial ejection pickup, etc.) (specify): (3) Ejection, unknown degree (9) Unknown (9) Unknown (9) Unknown **Ejection Area** Medium Status (Immediately Prior **Ejection Medium** (1) Windshield to Impact) (1) Door/hatch/tailgate (2) Left front (1) Open (2) Nonfixed roof structure (3) Right front (2) Closed (3) Fixed glazing (4) Left rear (3) Integral structure (4) Nonfixed glazing (specify): (5) Right rear (9) Unknown (6) Rear No [ \*] **ENTRAPMENT** Yes [ ] Describe entrapment mechanism: \_ (Note in vehicle interior diagram)

Form Approved
O.M.B. No. 2127-0021
NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

#### National Highway Traffic Safety Administration

## **OCCUPANT INJURY FORM**

1.	Primary Sampling Unit Number	45	3. Vehicle Number	01
2.	Case Number – Stratum	121F	4. Occupant Number	01

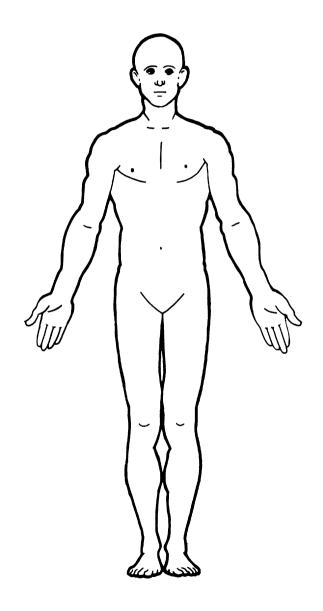
### **INJURY DATA**

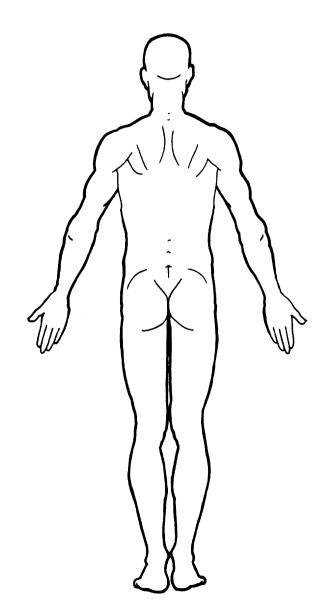
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than twenty injuries have been documented, encode the balance on the Occupant Injury Supplement.

			O.I.C. – A.I.	<u> </u>			1	
	Source of Injury Data	Body Region Aspect	Lesion	System Organ	A.J.S. Severity	Injury Source	Injury Source Confidence Level	Direct/ Indirect Occupant Area Injury Intrusion No.
1st	5	6. <u>F</u> 7. <u>S</u>		9. <u>I</u>	10	11/	123	13. 14. 00
2nd	15	16. <u>K</u> 17. <u>R</u>	18. <u> </u>	19.	20	21. 10	22	23 24
3rd	25. <u>7</u>	26. K 27. L	28. <u>C</u>	28. <u>I</u>	30	31. <u>09</u>	32	33. <u> </u>
4th	<b>35</b> . <u>7</u>	36. <u>R</u> 37. <u>L</u>	38. <u>L</u>	/ <sub>39.</sub>	40/	41. <u>0 4</u>	<u>42. 3</u>	43 44
5th	45	46 47	48	49	50	51	52	53 54
6th	55	56 57	58	59	60	61	62	63 64
7th	65	66 67	68	69	70	71	72	73 74
8th	75	76 77	78	79	80	81	82	83 84
9th	85	86 87	88	89	90	91	92	93 94
10th	95	96 97	98	99	100	101	102	103 104
11th	105	106 107	108	109	110	111	112	113 114
12th	115	116 117	118	119	120	121	122	123 124
13th	125	126 127	128	129	130	131	132	133 134
14th	135	136 137	138	139	140	141	142	143 144
15th	145	146 147	148	149	150	151	152	153 154
16th	155	156 157	158	159	160	161	162	163 164
17th	165	166 167	168	169	170	171	172	173 174
18th	175	176 177	178	179	180	181	182	183 184
19th	185	186 187	188	189	190	191	192	193 194
20th	195	196 197	198	199	200	201	202	203 204

	OCCUPANT INJURY DATA SUPPLEMENT									
	O.I.C. – A.I.S.							Injury		
	Source of Injury Data	Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
21st										
22nd			<del></del>							
23rd				<del></del>				-		
24th					*****			<del></del>		
25th					-					
26th										
27th							<del></del>			
28th	-									
29th										
30th										
31st		-						-		
32nd	***************************************					***************************************	***************************************			
33rd	-	-							***************************************	
34th								-		
35th				***************************************						
36th					**********	***************************************				
37th		<del></del>								
38th										
39th	All control of the co					***************************************				
40th										<del></del>
41st										<del></del>
42nd										<del></del>
43rd										<del></del>
44th	-				<del></del>					
45th										

# OFFICIAL INJURY DATA-SOFT TISSUE INJURIES





### **SOURCE OF INJURY DATA**

- (1) Autopsy records with or without hospital medical records
- (2) Hospital medical records other than emergency room (eg. discharge summary)
- (3) Emergency room records only (including associated Xrays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

#### UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify):
- (9) Police

#### **INJURY SOURCE**

#### **FRONT**

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add-on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify):

#### LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify):
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
- (27) Other left side object (specify):

#### RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify):
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, roof side
- (37) Other right side object (specify):

#### INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify):
- (44) Head restraint system
- (45) Air cushion
- (46) Other occupants (specify):
- (47) Interior loose objects
- (48) Child safety seat (specify):
- (49) Other interior object (specify):

#### ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

- (56) Floor including toe pan
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify):

#### EXTERIOR OF OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify):
- (68) Unknown exterior objects

#### EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify):
- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface (77) Side mirrors
- (78) Other side protrusions (specify):
- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify):
- (83) Unknown exterior of other motor vehicle

#### OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify)
- (86) Unknown vehicle or object

#### NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify)
- (97) Injured, unknown source

#### **INJURY SOURCE CONFIDENCE** LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

### **DIRECT/INDIRECT INJURY**

- (1) Direct contact injury
- (2) Indirect contact injury (3) Noncontact injury
- (7) Injured, unknown source

### OCCUPANT INJURY CLASSIFICATION

### O.I.C. Body Region

- Abdomen
- (Q) Ankle - foot
- (A) Arm (upper)
- (B) Back-thoracolumbar spine (C) Chest
- (E) Elbow
- (F) Face
- (R) Forearm
- (H)Head - skull
- (U) Injured, unknown region
- Knee (L) Leg (lower)
- Lower limb(s) (whole or unknown
- part) (N) Neck-cervical spine
- Pelvic hip
- (S) Shoulder
- (T)Thigh
- (X)Upper limb(s) (whole or unknown
- part)
- (O) Whole body

(W) Wrist - hand

#### Aspect of Injury

- Anterior-front (A)
- (B) Bilateral (rib fracture only).
- (C) Central
- Inferior lower
- (U) Injured, unknown aspect
- (P) Posterior - back (R)
- (S) Superior - upper Whole region

## Lesion

- (A) Abrasion
- (M) Amputation (V) Avulsion
- (B) Burn

Crush

(K) Concussion (C) Contusion

- Detachment, separation
- (D) Dislocation Fracture
- (Z) Fracture and dislocation
- Injured, unknown lesion
- Laceration Other
- Perforation, puncture Rupture
- (S) Sprain
- (T) Strain Total severance, transection

- Arteries veins (A)
- (B) Brain
- (E) Ears
- Heart

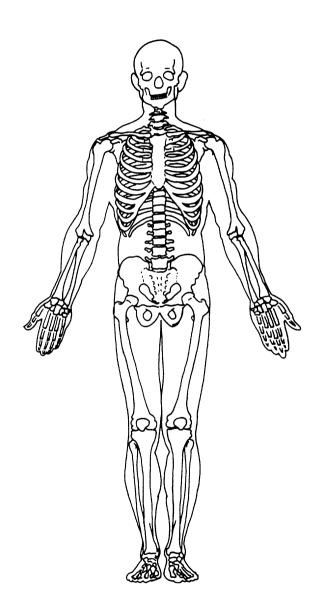
- Integumentary
- **Joints**
- (K) Kidneys (L)
- Liver Muscles
- Nervous system Pulmonary - lungs
- Respiratory
- (S) Skeletal (C) Spinal cord
- (Q) Spleen Thyroid, other endocrine gland (T)
- (G) Urogenital

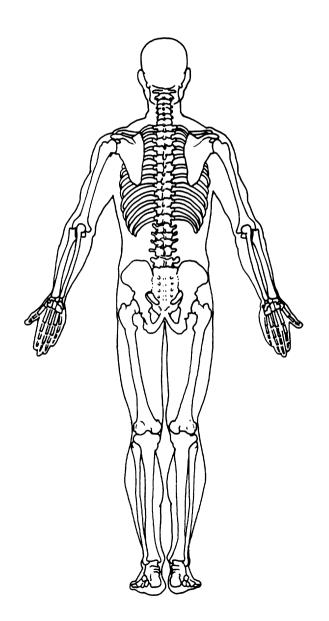
#### Vertebrae

- **Abbreviated Injury Scale**
- Minor injury Moderate injury
- (3)Serious injury
- Severe injury (5) Critical injury
- Maximum (untreatable) Injured, unknown severity

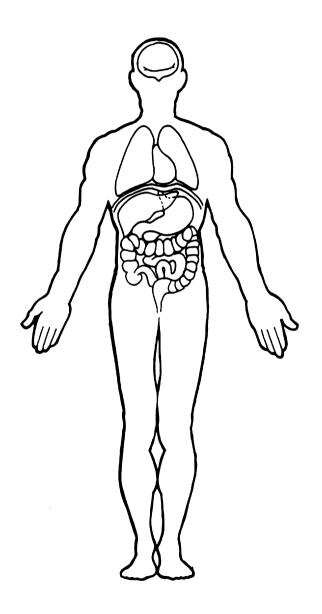
#### System/Organ

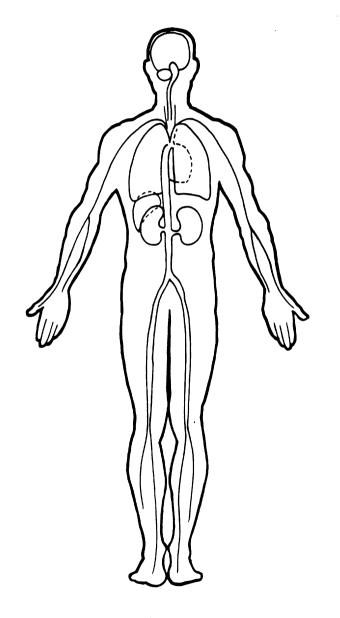
- All systems in region
- (D) Digestive
  - (0) Eye
  - Injured, unknown system





# OFFICIAL ÎNJURY DATA-INTERNAL INJURIES







17

U.S. Department of Transportation

National Highway Traffic Safety Administration

## **UPDATE FORM**

NATIONAL ACCIDENT SAMPLING SYSTEM **CRASHWORTHINESS DATA SYSTEM** 

1. Primary Sampling Unit Number $4 \leq \frac{4}{5}$	Driver or Occupant Name
2. Case Number – Stratum	Address:
3. Vehicle Number	
4. Occupant Number	Other Information:
BEGENED 1989	(Sanitize this section prior to Update submission.)

	INJURY DATA CODED ON INITIAL SUBMISSION										
		O.I.C. – A.	I.S.			Injury Source	Direct/				
	Source of Injury Data	Body Region Aspect Lesion	System Organ		In <del>j</del> ury Source	Confidence Level	Indirect Occupant Area Injury Intrusion No.				
1st	5. <u>7</u>	6. <u>F</u> 7. <u>S</u> 8. <u>C</u>	9. <u>I</u>	10	11. <u>0</u> <u>/</u>	<sub>12.</sub> <u>3</u>	13. <u>1</u> 14. <u>00</u>				
2nd	157	16. <u>K</u> 17. <u>R</u> 18. <u>C</u>	19. <u>T</u>	20	211 @	22. <u> </u>	23 24 29				
3rd	257	26. <u>K</u> 27. <u>L</u> 28. <u>C</u>	29. <u>I</u>	30	31. 09	32. <u>/</u>	33. <u>/</u> 34. <u>o e</u>				
4th	35. <u>7</u>	36. <u>L</u> 37. <u>L</u> 38. <u>L</u>	39. <u>I</u>	40	41. 04	<sub>42.</sub> <u>3</u>	43. 1 44. 00				
5th	45	46 47 48	49	50	51	52	53 54				
6th	55	56 57 58	59	60	61	62	63 64				
7th	65	66 67 68	69	70	71	72	73 74				
8th	75	76 77 78	79	80	81	82	83 84				
9th	85	86 87 88	89	90	91	92	93 94				
10th	95	96 97 98	99	100	101	102	103 104				
NOTI	E: If neces	ssary, keep copy of origin	nal Occup	pant Injury	y form and su	ıbmit as part	of update.				

UPDATED CASE INFORMATION									
	INITIAL SUBMISSION	FINAL		SUBMISSION FINAL /					
GV12. Alcohol Test Results for Driver	96	96	OA35. Treatment — Mortality OA36. Type of Medical Facility	<u>u</u>					
OA05. Occupant's Age OA06. Occupant's Sex	<u>6</u> 6	65	(for Initial Treatment)	$\frac{1}{00}$ $\frac{1}{00}$					
OA07. Occupant's Height	74	<del>74</del> 201	OA37. Hospital Stay OA38. Working Days Lost	97 97					
OA08. Occupant's Weight	_60_1_	201	OA39. Time to Death	<u> </u>					
OA17. Manual (Active) Belt System Availability	<u>3</u>	<u>3</u>	OA40. 1st Medically Reported Cause of Death	00 00					
OA18. Manual (Active) Belt System Use	00	00	OA41. 2nd Medically Reported Cause of Death	00 00					
OA21. Automatic (Passive) Restraint System Availability	0	0	OA42. 3rd Medically Reported Cause of Death	00 00					
OA22. Automatic (Passive) Restraint Function	0	0	OA43. Number of Recorded Injuries for This Occupant	04 04					

# INJURY DATA

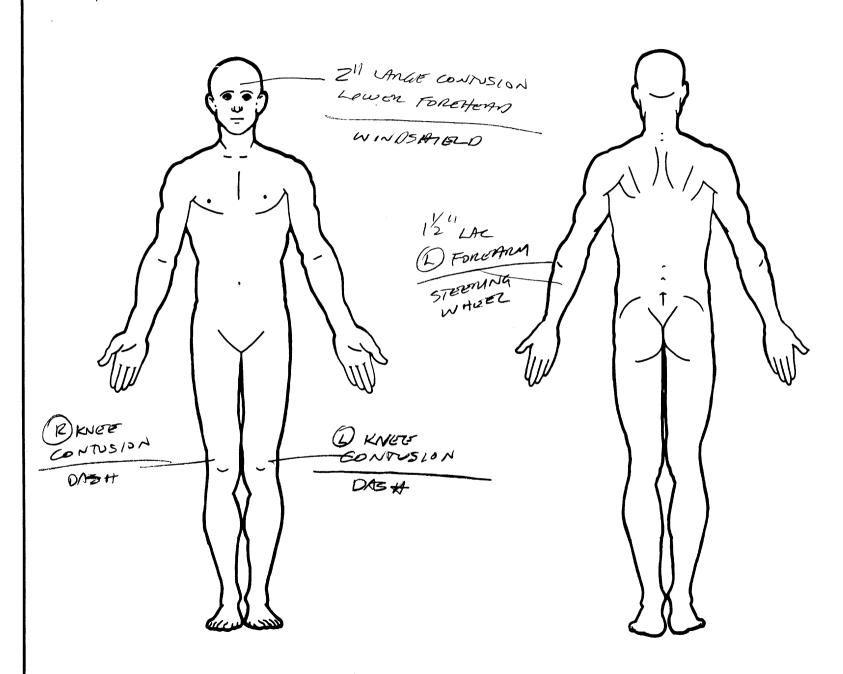
Record below the actual injuries sustained by this occupant that were identified from the unofficial and official sources prior to initial case submission **and from subsequently** acquired medical data. Remember not to double count an injury just because it was identified from two different sources.

	<b>S</b> a		-	O.I.C.	– A.I.S.				Injury			
	Source of Injury Data	Body Region	Asp	ect Le	•			Injury Source	Source Confidence Level	Direct/ Indirect Injury		oant Area sion No.
1st					)		1 11.	01	123	13	14.	00
2nd	_					<u>I</u> 20.		10	22	23	24.	00
3rd	_					工 30.	31.	09	32	33. <u> </u>	34.	00
4th	_	_			۸	土 40.	41.		42. <u>3</u>	43.	44.	<u>ə</u> =
5th	45. 3	46.	<b>247.</b> -	<u>L</u> 48.	<del>1</del> 49.	50.	<u></u> 51.	<u>04</u>	52	53	54.	00
6th	55	56	. <b>57</b> .   .	58.	59.	60.	<b></b> 61.		62	63	64.	
7th	65	66	. 67	68.	69.	<b></b> 70.	<del></del> 71.		72	73	74.	
8th	75	76	. 77	78.	79.	80.	81.		82	83	84.	
9th	85	86	. 87	88.	89.	90.	<b></b> 91.		92	93	94.	
10th	95	96	. 97.   .	98.	<u> </u>	100.	101.		102	103	104.	
11th	105	106	. 107	108.	109.	110.	111.		112	113	114.	
12th	115	116	. 117	118.	119.	120.	121.		122	123	124.	
13th	125	126	. 127	128.	129.	130.	131.		132	133	134.	
14th	135	136	. 137	138.	139.	140.	141.		142	143	144.	
15th	145	146	. 147	148.	149.	150.	151.	<del></del>	152	153	154.	
16th	155	156	. 157	158.	159.	160.	161.		162	163	164.	
17th	165	166	. 167	168.	169.	170.	171.		172	173	174.	
18th	175	176	. 177	178.	179.	180.	181.		182	183	184.	
19th	185	186	. 187	188.	189.	190.	191.		192	193	194.	
20th	195	196	. 197	198.	199.	200.	201.		202	203	204.	

If greater than 20 injuries, code additional on Occupant Injury Data Supplement.

	OCCUPANT INJURY DATA SUPPLEMENT										
	Source	O.I.C. – A.I.S.					Injury Source	Direct/			
	of Injury Data	Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Confidence Level	Indirect Injury	Occupant Area Intrusion No.	
21st		_						-	-		
22nd	*****										
23rd											
24th			_								
25th											
26th											
27th								-		<del></del>	
28th		_									
29th											
30th			<u></u>								
31 <b>s</b> t			<del></del>							MINISTER AND	
32nd	-		<del></del>					4		electricism discussions	
33rd	- Andrews Andrews							***************************************			
34th										-	
35th	-	***************************************		and the same				************			
36th		***************************************	***************************************	********	***************************************						
37th				_				Market Control			
38th		*************	An and transportation		whereachee	***************************************		***************************************			
39th		***************************************	***************************************		-				***********		
40th								***************************************		<del></del>	
41st	<del></del>								-		
42nd						44-14-11-1		-		<del></del>	
43rd						***********		-	***************************************		
44th											
45th											

## OFFICIAL INJURY DATA - SOFT TISSUE INJURIES



#### **SOURCE OF INJURY DATA**

#### OFFICIAL

- (1) Autopsy records with or without hospital medical records
- (2) Hospital medical records other than emergency room (eg. discharge summary)
- (3) Emergency room records only (including associated Xrays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify):
- (9) Police

#### **INJURY SOURCE**

#### FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add-on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify):

#### LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify):
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
- (27) Other left side object (specify)

#### RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar (33) Right B pillar
- (34) Other right pillar (specify):
- (35) Right side window glass or frame
- Right side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, roof side
- (37) Other right side object (specify):

#### INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify):
- (44) Head restraint system
- (46) Other occupants (specify):
- (47) Interior loose objects
- (48) Child safety seat (specify):
- (49) Other interior object (specify):

#### ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail (54) Roof or convertible top
- FLOOR
- (56) Floor including toe pan
- (57) Floor or console mounted transmission lever, including
- (58) Parking brake handle
- (59) Foot controls including parking brake

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify):

#### EXTERIOR OF OCCUPANT'S VEHICLE

- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify):
- (68) Unknown exterior objects

#### EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify):
- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify):
- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify):
- (83) Unknown exterior of other motor vehicle

#### OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (85) Other vehicle or object (specify)
- (86) Unknown vehicle or object

#### NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify)
- (97) Injured, unknown source

### **INJURY SOURCE CONFIDENCE LEVEL**

- (1) Certain
- (2) Probable
- (3) Possible (9) Unknown

#### DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury (3) Noncontact injury
- (7) Injured, unknown source

### OCCUPANT INJURY CLASSIFICATION

#### O.I.C. Body Region

- Abdomen
- Ankle-foot (A) Arm (upper)
- (B) (C) (E) Back - thoracolumbar spine
- Chest
- Elbow
- Face
- (R) Forearm (H)
- Head skull (U) Injured, unknown region
- (K) Knee
- (L) Lower limb(s) (whole or unknown
- Neck-cervical spine
- Pelvic hip
- (S) Shoulder (T) Thigh
- (X) Upper limb(s) (whole or unknown part)
- (0)Whole body

(W) Wrist - hand

## Aspect of Injury

- (A)
  - Bilateral (rib fracture only).
- Inferior lower
- Posterior back Right
- (S) (W)

#### Lesion

- Abrasion
- Amputation (M)
- (V) Avulsion
- Concussion

- Anterior front
- (C Central
- (U) Injured, unknown aspect
- Superior upper Whole region

- (B) Burn
- (C) Contusion Crush

- · (G) Detachment, separation
- (D) Dislocation
- Fracture
- (Z) Fracture and dislocation (U) Injured, unknown lesion
- (L) Laceration
- (0) Other

(E)

- Perforation, puncture Sprain
- Rupture (S)
- (T) Strain

Total severance, transection

## System/Organ

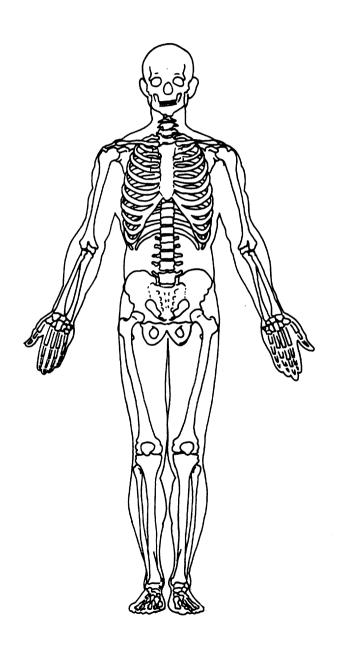
- All systems in region
- (A) Arteries - veins (B) Brain
- (D) Digestive
- (E) Ears (0)
- (H) (U) Injured, unknown system

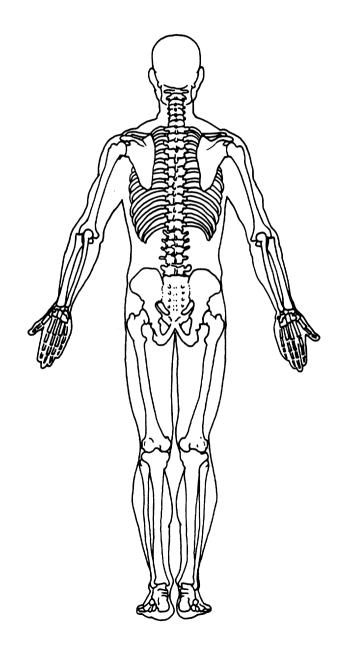
- - Integumentary Joints
- (K) Kidneys (L) Liver
- (M) Muscles
- (N) Nervous system (P) Pulmonary - lungs
- Respiratory (S) Skeletal
- (C) Spinal cord
- (Q) Spleen (T) Thyroid, other endocrine gland
- Urogenital
- (V)

#### **Abbreviated Injury Scale**

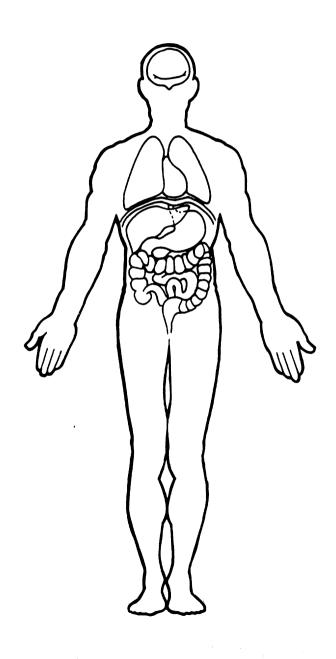
- (1) Minor injury
- (2) Moderate injury
- (3)Serious injury
- (6)Maximum (untreatable)
- (7) Injured, unknown severity
- (4)Severe injury (5) Critical injury

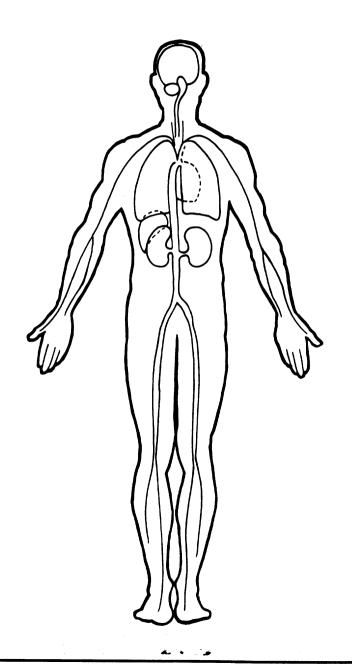
# OFFICIAL INJURY DATA - SKELETAL INJURIES





# OFFICIAL INJURY DATA - INTERNAL INJURIES





Form Approved
O.M.B. No. 2127-0021
NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

#### National Highway Traffic Safety Administration

### **OCCUPANT INJURY FORM**

1. Primary Sampling Unit Numb	per <u>45</u>	3. Vehicle Number	01
2. Case Number – Stratum	121F	4. Occupant Number	02

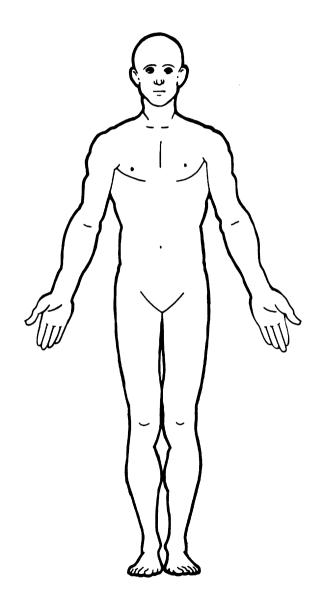
### **INJURY DATA**

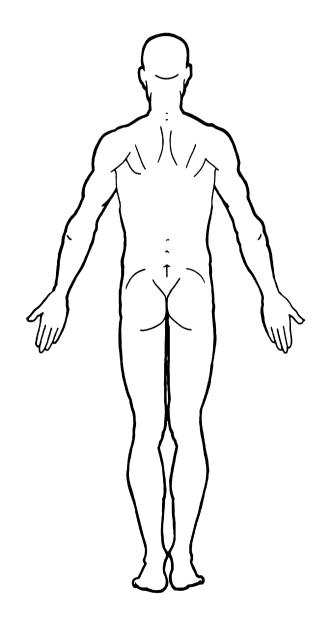
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than twenty injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source		O.I.C. — A.I	S.		1	Injury	
	of Injury Data	Body Region Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Source Confidence Level	Direct/ Indirect Occupant Area Injury Intrusion No.
1st	5	6. <u>F</u> 7. <u>S</u>	8. <u> </u>	9. <u>I</u>	10	11. 0 1	12	13 14
2nd	15	16. <u>/</u> 17. <u>/</u>	18	19. <u> </u>	20.	21/_/	22	23 24
3rd	25. 7	26. <u>/&lt;</u> 27. <u>\</u>	28. <u>C</u>	29	<b>∕</b> 30. ⊥_	31	32	33. <u>/</u> 34. <u>O S</u>
4th	35	36 37	38	39. —	40	41	42	43 44
5th	45	46 47	48	49	50	51	52	53 54
6th	55	56 57	58	59	60	61	62	63 64
7th	65	66 67	68	69	70	71	72	73 74
8th	75	76 77	78	79	80	81	82	83 84
9th	85	86 87	88	89	90	91	92	93 94
10th	95	96 97	98	99	100	101	102	103 104
11th	105	106 107	108	109	110	111	112	113 114
12th	115	116 117	118	119	120	121	122	123 124
13th	125	126 127	128	129	130	131	132	133 134
14th	135	136 137	138	139	140	141	142	143 144
15th	145	146 147	148	149	150	151	152	153 154
16th	155	156 157	158	159	160	161	162	163 164
17th	165	166 167	168	169	170	171	172	173 174
18th	175	176 177	178	179	180	181	182	183 184
19th	185	186 187	188	189	190	191	192	193 194
20th		196 197	198	199	200	201	202	203 204

	OCCUPANT INJURY DATA SUPPLEMENT										
			C	D.I.C. — A.I	l.S.			Injury			
	Source of Injury Data	Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.	
21st											
22nd											
23rd											
24th								<del></del>			
25th											
26th											
27th											
28th					<del></del>		<del></del>				
29th											
30th					Michigan Santan						
31st			<u></u>	<del></del>							
32nd						-	-	***************************************			
33rd	***************************************		***************************************				-				
34th	***************************************	-						<u> </u>			
35th		-	***************************************	-				******			
36th			William Indiana						-		
37th										<del></del>	
38th				-							
39th										***************************************	
40th											
41st											
42nd											
43rd											
44th								<del></del>			
45th										<del></del>	

## OFFICIAL INJURY DATA-SOFT TISSUE INJURIES





## **SOURCE OF INJURY DATA**

- (1) Autopsy records with or without hospital medical records
- (2) Hospital medical records other than emergency room (eg. discharge summary)
- (3) Emergency room records only (including associated Xrays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

#### UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify):
- (9) Police

## **INJURY SOURCE**

#### **FRONT**

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add-on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify):

## LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify):
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
- (27) Other left side object (specify):

#### RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify):
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, roof side
- (37) Other right side object (specify):

#### INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle(42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify):
- (44) Head restraint system
- (45) Air cushion
- (46) Other occupants (specify):
- (47) Interior loose objects
- (48) Child safety seat (specify):
- (49) Other interior object (specify):

## ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible ton

## FLOOR

- (56) Floor including toe pan
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify):

## EXTERIOR OF OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify):
- (68) Unknown exterior objects

## EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify):
- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify):
- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify):
- (83) Unknown exterior of other motor vehicle

## OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify)
- (86) Unknown vehicle or object

#### NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify)
- (97) Injured, unknown source

## INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible (9) Unknown

## DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## OCCUPANT INJURY CLASSIFICATION

## O.I.C. Body Region

- Abdomen
- (Q) Ankle - foot
- (A) Arm (upper)
- (B) Back-thoracolumbar spine
- (C) Chest
- (E) Elbow
- (F) Face
- (R) Forearm (H) Head - skull
- (U) Injured, unknown region
- (K) Knee
- Leg (lower) (L)
- (Y) Lower limb(s) (whole or unknown
- part)
- (N) Neck-cervical spine
- Pelvic hip
- Shoulder (S)
- (T) Thiah
- Upper limb(s) (whole or unknown
- part)
- (0)Whole body

Wrist-hand

## Aspect of Injury

(W)

- Anterior front
  - Bilateral (rib fracture only).
- (C) Central
- Inferior -- lower
- Injured, unknown aspect
- Posterior-back (R) Right
- Superior upper (W) Whole region

## Lesion

(V)

- (A) Abrasion
- (M) Amputation
- (B) Burn (K) Concussion

Avulsion

(C) Contusion Crush

- Detachment, separation
- Dislocation
- Fracture
- Fracture and dislocation
- Injured, unknown lesion Laceration
- Other
- Perforation, puncture
- (R) Rupture
- (S) Sprain
- (T) Strain Total severance, transection (E)

## System/Organ

- (W) All systems in region
- (A) Arteries - veins

Eye

- (B) Brain (D) Digestive
- (E) Ears

(0)

Heart Injured, unknown system

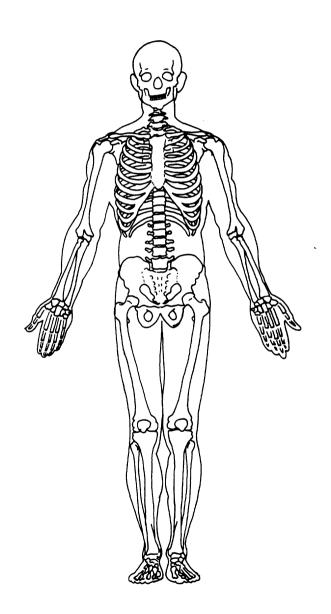
- - Integumentary (J) Joints
  - (K) Kidnevs
  - (L) Liver (M) Muscles
  - (N) Nervous system
  - Pulmonary lungs Respiratory
  - (S) Skeletal (C) Spinal cord
  - (Q) Spleen
- (T) Thyroid, other endocrine gland (G) Urogenital
- Vertebrae

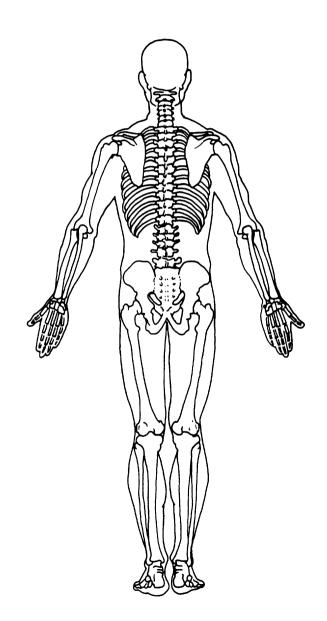
- (2)
- (3) Serious injury (4) Severe injury
- (5) Critical injury

## **Abbreviated Injury Scale**

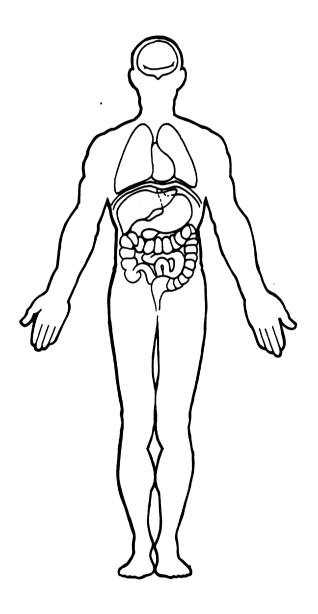
- Minor injury
- Moderate injury
- (6) Maximum (untreatable)
- Injured, unknown severity

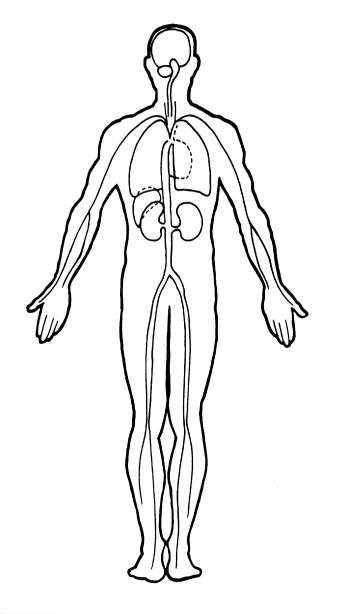
# OFFICIAL INJURY DATA-SKELETAL INJURIES





# OFFICIAL ÎNJURY DATA-INTERNAL INJURIES





## **UPDATE FORM**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

National Highway Traffic Safety Administration

1. Primary Sampling Unit Number  2. Case Number – Stratum	Driver or Occupant Name:
3. Vehicle Number	
4. Occupant Number	Other Information:
RECEIVED 1989	(Sanitize this section prior to Update submission.)

	INJURY DATA CODED ON INITIAL SUBMISSION								
	_	O.I.C. – A.I.S.		Injury Source	Direct/				
	Source of Injury Data	Region Aspect Lesion Organ Se	everity Source	Confidence Level	Indirect Occupant Area Injury Intrusion No.				
1st	5. <u>7</u>	6. $\frac{\cancel{F}}{}$ 7. $\frac{5}{}$ 8. $\frac{\cancel{C}}{}$ 9. $\frac{1}{}$ 10	0. <u> </u>	12/	13. <u>/</u> 14. <u>0</u> <u>0</u>				
2nd	15. <u> </u>	16. $\frac{K}{}$ 17. $\frac{R}{}$ 18. $\frac{C}{}$ 19. $\frac{\widehat{L}}{}$ 2	0 21./	22/	23 24				
3rd	25	26. <u>K</u> 27. <u>L</u> 28. <u>C</u> 29. <u>I</u> 3	0. <u>L</u> \$1. <u>L</u>	32	33. <u>/</u> 34. <u>O</u> <u>O</u>				
4th	35	36 37 38 39 4	0.	42	43 44				
5th	45	46 47 48 49 5	0 51	52	53 54				
6th	55	56 57 58 59 6	60 61	62	63 64				
7th	65	66 67 68 69 7	71	72	73 74				
8th	75	76 77 78 79 8	80 81	82	83 84				
9th	85	86 87 88 89 9	91	92	93 94				
10th	95	96 97 98 99 10	00 101	102	103 104				

NOTE: If necessary, keep copy of original Occupant Injury form and submit as part of update.

UPDATED CASE INFORMATION									
	INITIAL SUBMISSION	FML		SUBMISSION FINAL					
GV12. Alcohol Test Results for Driver OA05. Occupant's Age OA06. Occupant's Sex OA07. Occupant's Height OA08. Occupant's Weight	96 <u>70</u> 2 66 187	96 7 6 8 7 8 9 7	OA35. Treatment — Mortality OA36. Type of Medical Facility (for Initial Treatment) OA37. Hospital Stay OA38. Working Days Lost OA39. Time to Death	1 1 0° 0° 97 97 0° 0°					
OA17. Manual (Active) Belt System Availability	3	3	OA40. 1st Medically Reported Cause of Death	00 00					
OA18. Manual (Active) Belt System Use	<u> </u>	00	OA41. 2nd Medically Reported Cause of Death	00 00					
OA21. Automatic (Passive) Restraint System Availability OA22. Automatic (Passive)	<u> </u>	<u>0</u>	OA42. 3rd Medically Reported Cause of Death OA43. Number of Recorded Injuries for This Occupant	0000					
Restraint Function		· . —							

## **INJURY DATA**

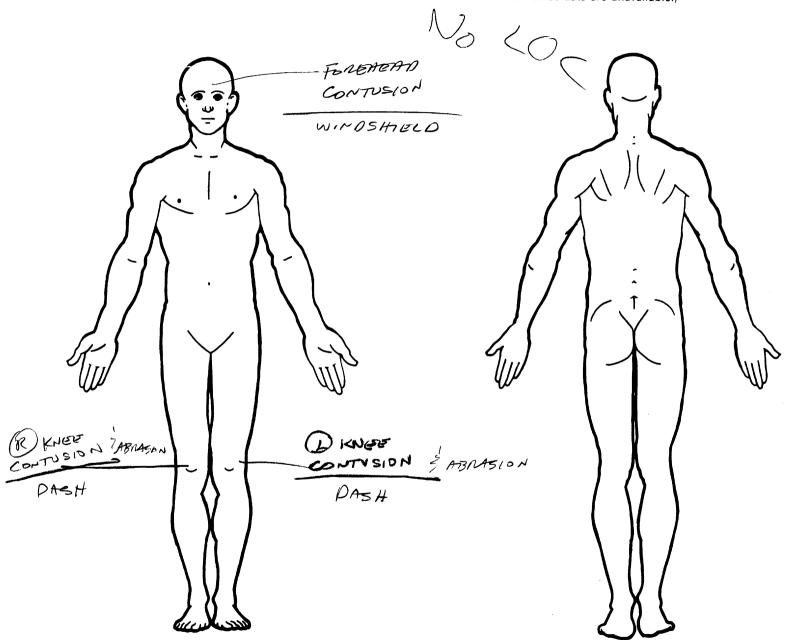
Record below the actual injuries sustained by this occupant that were identified from the unofficial and official sources prior to initial case submission **and from subsequently** acquired medical data. Remember not to double count an injury just because it was identified from two different sources.

	Source			0.1.0	C. – A.I.S						Injury Source	Direct/		
	of Injury Data	Boo Regi	•	pect L		System Organ		I.S. erity	_	njury ource	Confidence Level	Indirect Injury		pant Area Ision No.
1st	<sub>5.</sub> <u>3</u>	6	<u>F</u> 7.	5 8	<u>e</u>	9. <u>I</u>	10.		11.	01	12	13	14.	0 0
2nd	15. 3	16	<u>K</u> 17.	<u>R</u> 18	<u>c</u> 1	9. <u>I</u>	20.		21.	11	22	23	<u>l</u> 24.	0 0
3rd	<sub>25.</sub> <u>3</u>	26	<u>K</u> 27.	<u>L</u> 28	<u></u> 2	9. <u>I</u>	30.	1	31.	10	32	33	34.	00
4th							_			11	42	43	/ 44.	00
5th	45. <u>3</u>	46	<u>K</u> 47.	<u>L</u> 48	<u>A</u> 4	9. <u>I</u>	50.		51.	10	52	53. <u>/</u>	/ _ 54.	00
6th	55	56	57.	58	5	9	60.		61.		62	63	64.	
7th	65	66	67.	68	6	9	70.		71.		72	73	_ 74.	
8th	75	76	77.	78	7	9	80.		81.		82	83	_ 84.	
9th	85	86	<b> 87</b> .	88	8	9	90.		91.		92	93	_ 94.	
10th	95	96	<b></b> 97.	98	9	9	100.	1	01.		102	103	_ 104.	
11th	105	106	107.	10	8 1	09	110.	1	11.		112	113	_ 114.	
12th	115	116	117.	11	8 1	19	120.	1	21.		122	123	_ 124.	
13th	125	126	127.	12	8 1	29	130.	1	31.		132	133	_ 134.	
14th	135	136	137.	13	8 1	39	140.	1	41.		142	143	_ 144.	
15th	145	146	147.	14	8 1	49	150.	1	51.		152	153	_ 154.	
16th	155	156	157.	15	8 1	59	160.	1	61.		162	163	_ 164.	
17th	165	166	167.	16	8 1	69	170.	1	71.		172	173	_ 174.	
18th	175	176	177.	17	8 1	79	180.	1	81.		182	183	_ 184.	
19th	185	186	187.	18	8 1	89	190.	1	91.		192	193	_ 194.	
20th	195	196	197.	19	8 1	99	200.	2	01.		202	203	_ 204.	

If greater than 20 injuries, code additional on Occupant Injury Data Supplement.

	OCCUPANT INJURY DATA SUPPLEMENT									
	Source	Body	C	).I.C. — A.I		A.I.S.	la incor	Injury Source Confidence	Direct/	0
	of Injury Data		Aspect	Lesion	System Organ	Severity	Injury Source	Level	Indirect Injury	Occupant Area Intrusion No.
21st							<del></del>	<del></del>		
22nd					<del></del>					
23rd									_	
24th										
25th								***************************************		
26th	-									
27th										
28th	-									
29th						water particular				
30th			_							
31st					<del></del>				-	<u> </u>
32nd	<del></del>									attitute tilinin ettimorpus
33rd	etrosta.eta.eta.e	-		***********	***************************************			***************************************		
34th		***********								
35th										
36th			****		***************************************					-
37th										
38th						-				
39th		-	***************************************				***************************************			and the second
40th						<del></del>	<del></del>			
41st							<del></del>			
42nd		*******		<del></del>				***************************************		
43rd		***************************************				<del></del>				
44th							<del></del>			
45th										<del></del>

# OFFICIAL INJURY DATA - SOFT TISSUE INJURIES



## **SOURCE OF INJURY DATA**

- (1) Autopsy records with or without hospital medical
- (2) Hospital medical records other than emergency room (eg. discharge summary)
- (3) Emergency room records only (including associated Xrays or other lab reports)
- (4) Private physician, walk-in or emergency clinic
- UNOFFICIAL
- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify):
- (9) Police

## **INJURY SOURCE**

#### FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add-on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify):

## LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify):
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
- (27) Other left side object (specify):

#### RIGHT SIDE

- (30) Right side interior surface, excluding hardware or
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify):
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, roof side
- (37) Other right side object (specify):

#### INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify):
- (44) Head restraint system
- (45) Air cushion
- (46) Other occupants (specify):
- (47) Interior loose objects
- (48) Child safety seat (specify):
- (49) Other interior object (specify):

#### ROOF

- (50) Front header
- (£1) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

## **FLOOR**

- (56) Floor including toe pan
- (57) Floor or console mounted transmission lever, including
- (58) Parking brake handle
- (59) Foot controls including parking brake

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify):

## EXTERIOR OF OCCUPANT'S VEHICLE

- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify):
- (68) Unknown exterior objects

### EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify):
- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify):
- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify):
- (83) Unknown exterior of other motor vehicle

## OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify)
- (86) Unknown vehicle or object

## NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92). Other noncontact injury source (specify)
- (97) Injured, unknown source

## **INJURY SOURCE CONFIDENCE LEVEL**

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

## **DIRECT/INDIRECT INJURY**

- (1) Direct contact injury
- (2) Indirect contact injury (3) Noncontact injury
- (7) Injured, unknown source

## OCCUPANT INJURY CLASSIFICATION

## O.I.C. Body Region

- Abdomen
- (Q) Ankle - foot
- (A) Arm (upper) (B) Back - thoracolumbar spine
- (C) Chest
- (E) Elbow
- (F) Face
- (R) Forearm (H) Head-skull
- (U) Injured, unknown region
- (K) (L) Leg (lower)
- (Y) Lower limb(s) (whole or unknown part)
- (N) Neck-cervical spine
- Pelvic hip
- (S) Shoulder Thigh
- (X) Upper limb(s) (whole or unknown part)
- (O) Whole body

(W) Wrist-hand

## Aspect of Injury

- (A) Anterior - front
- Bilateral (rib fracture only).
- Central (C)
- (1)Inferior - lower Injured, unknown aspect (U)
- Posterior back Right
- (S) Superior - upper (W) Whole region

## Lesion

(R)

- (M)Amputation
- (V) Avulsion
- (K) Concussion
- Abrasion
- (B) Burn
- (C) Contusion (N) Crush

- (G Detachment, separation
- (D) Dislocation
- (F) Fracture
- Fracture and dislocation
- Injured, unknown lesion
- (L) Laceration Other
- (O)
- Perforation, puncture Rupture
- (S) Sprain

(T)

(E)

Strain Total severance, transection

## System/Organ

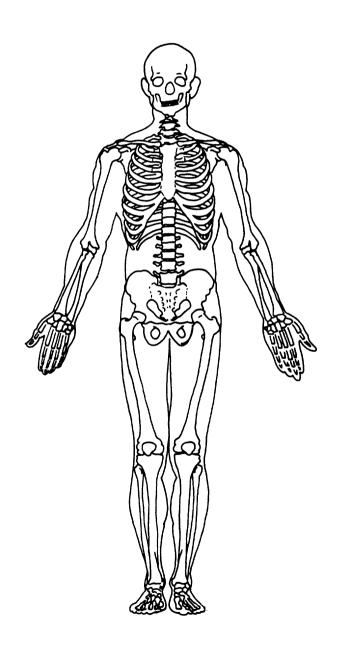
- All systems in region
- (A) Arteries - veins (B) Brain
- (D) (E) Digestive Ears
- (O)
- (H) (U) Injured, unknown system

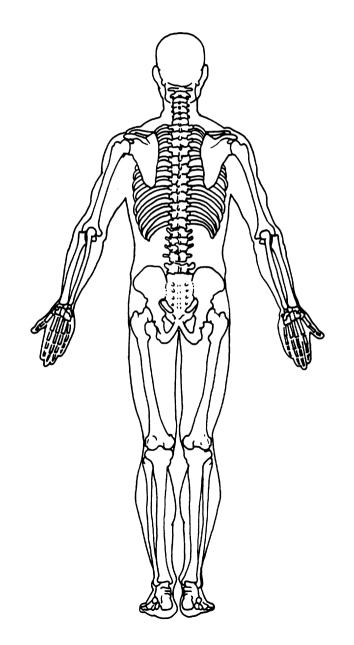
- - Integumentary (J)Joints
  - (K) Kidnevs (L) Liver
  - Muscles
  - Nervous system (P) Pulmonary - lungs
  - (R) Respiratory Skeletal
  - (S) Spinal cord
  - (Q)
  - (T) Thyroid, other endocrine gland (G) Urogenital
  - Vertebrae

## **Abbreviated Injury Scale**

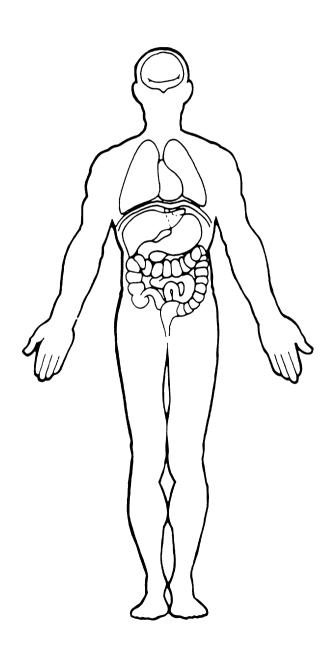
- Minor injury
- (2) Moderate injury
- (3) Serious injury (4) Severe injury
- (5) Critical injury
- (6)Maximum (untreatable) (7)Injured, unknown severity

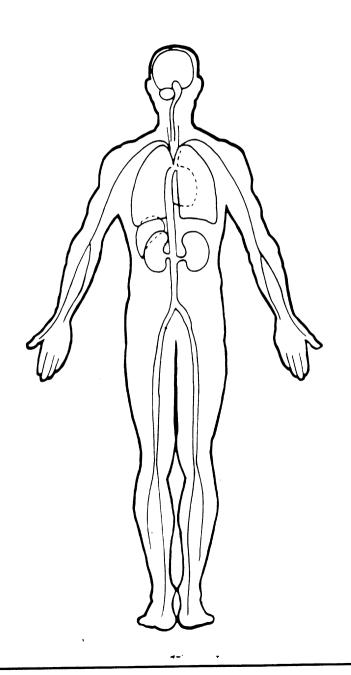
# OFFICIAL INJURY DATA-SKELETAL INJURIES





# OFFICIAL INJURY DATA-INTERNAL INJURIES







U.S. Department of Transportation

## **EXTERIOR VEHICLE FORM**

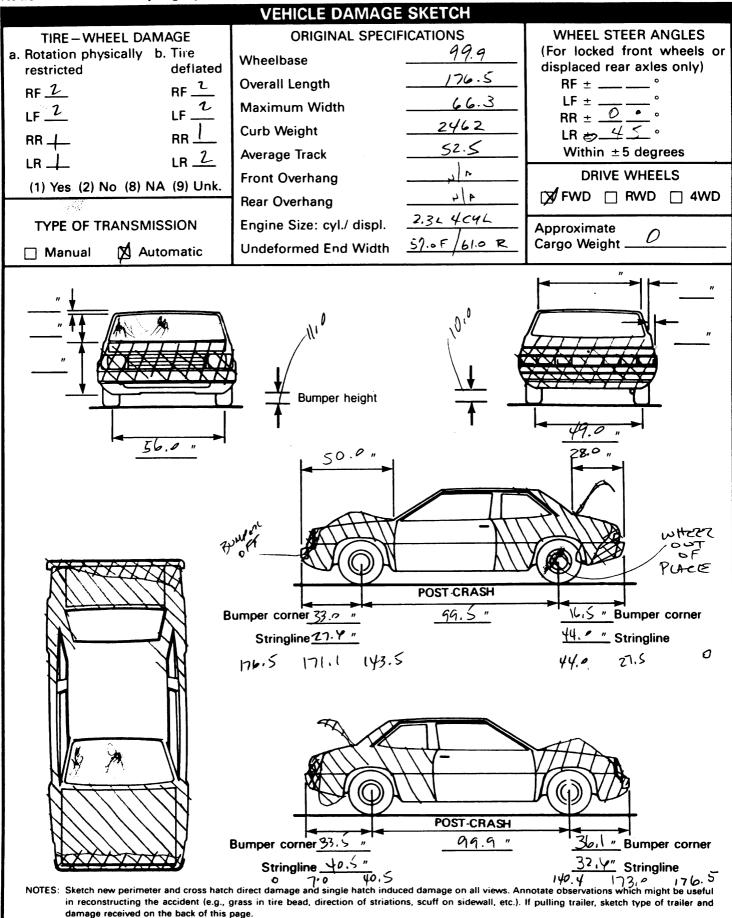
National Highway Traffic Safety

NATIONAL ACCIDENT SAMPLING SYSTEM

Administration					CRASH	IWORTHII	NESS DAT	A SYSTEM			
1. Primary	Sampling Unit Nur	mber	45	_ 3. V	ehicle N	lumber				0	2
2. Case Nu	ımber – Stratum		<u> 21 F</u>	-							
		'	/EHICLE I	DENT	IFICAT	ION					
vin	<u>FABP3</u>	<u>3 S X</u>	HK	****		`	Model	Year _	1987		
Vehicle Ma	ke (specify):	ORO				le Mode	el (speci	fy): <u>78</u>	EMPO		
			LC	CATO	)R						
	end of the damage an undamaged ax	•		nicle lo	ngitudin	al cente	er line o	r bump	er corne	er for en	d
Specific In	npact No.	Location o	of Direct Da	mage	ge Location of Field L						
/	BE41~.	54 From	K.R. Col	WER		151	NTA	e no	BRB	unger	2
2	ENTIR	& Front	BUMPE	n		GN	TRE	Fno,	NT B	mper	2
			CRUS	H PRO	OFILE						
NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).  Measure and document on the vehicle diagram the location of maximum crush.  Measure Cho Continue driver to passenger side in front or rear impacts and rear to front in side impacts.  Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.  Use as many lines/columns as necessary to describe each damage profile.											
Specific Impact Number	Plane of C-Measurements	Direct D Width (CDC)	Damage Max Crush	Field L	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	±D
/	REARBUMPER	57,0	Clusii	51.5	22.5	22.0	17.7	13.5	10.0	7.0	9
1	FREE SPACE	1 3 1/3		<u> </u>	1.7	,3	. 1	. 1	, 3	1.7	0
1	C-MEA		25.8		25,8	21.7	17.6	13.4	9.7	5.3	0
							1				
2	FRONT BUMPER			56.0	5.4	4,0	2.9	2.8	35	3.5	0
2	FREE SPECE				3.8	1.0	, 4	, 4	1.0	3.8	0
2	C-MEA				1.6	3.0	7.5	2.4	2.5	a	0
2	ABOVE TOGALL			56,0	15.2	17.4	16.7	17.0	18.0	15.0	٥
2	FUEL SPEC				11.8	9.0	₹ <b>8.</b> 4	8.4	9.0	11.8	O
2	C-M51				3.4	8.4	8.3		9.0	3.2	0
					ļ						
5	AVG COMET	-	5,8	56.0	1.6	5.7	5,4	5.5	5.8	3.8	0

HS Form 435A 1/89

UNABLE to SHOW SCIDES TO GRILL DUE TO OTHER VEHICLE MEASUREMENTS DONE BY HAND, HOWEVER, THEY FIRE



Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CODES FOR OF	BJECT CONTACTED
01-30 – Vehicle Number  Noncollision (31) Overturn – rollover (32) Fire or explosion (33) Jackknife (34) Other intraunit damage (specify):	(57) Fence (58) Wall (59) Building (60) Ditch or Culvert (61) Ground (62) Fire hydrant (63) Curb (64) Bridge
(38) Other noncollision (specify):  (39) Noncollision—details unknown  Collision with Fixed Object (41) Tree (≤4 inches in diameter) (42) Tree (>4 inches in diameter) (43) Shrubbery or bush (44) Embankment	(68) Other fixed object (specify):  (69) Unknown fixed object  Collision With Nonfixed Object  (71) Motor vehicle not in transport  (72) Pedestrian  (73) Cyclist or cycle  (74) Other nonmotorist or conveyance (specify)
<ul> <li>(45) Breakaway pole or post (any diameter)</li> <li>Nonbreakaway Pole or Post</li> <li>(50) Pole or post (≤4 inches in diameter)</li> <li>(51) Pole or post (&gt;4 but ≤12 inches in diameter)</li> <li>(52) Pole or post (&gt;12 inches in diameter)</li> <li>(53) Pole or post (diameter unknown)</li> </ul>	(75) Vehicle occupant (76) Animal (77) Train (78) Trailer, disconnected in transport (88) Other nonfixed object (specify):  (89) Unknown nonfixed object
(54) Concrete traffic barrier (55) Impact attenuator (56) Other traffic barrier (specify):	(98) Other event (specify):  (99) Unknown event or object

## **DEFORMATION CLASSIFICATION BY EVENT NUMBER**

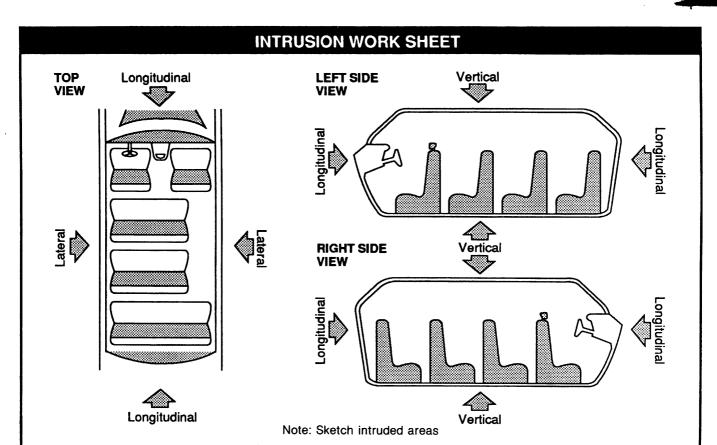
Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
0	01	180	00	$\underline{\mathcal{B}}$	D	E	W.	05
02	03	000	00	F	<u>o</u>	E	لب	01
				<del></del>			-	
							<del>'</del>	
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								·

## **INTERIOR VEHICLE FORM**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

National Highway Traffic Safety Administration

,	GLAZING
1. Primary Sampling Unit Number 45	Glazing Damage from Impact Forces
2. Case Number – Stratum	
2.2	15.WS 2 16. LF 3 17. RF 3 18. LR 4 19. RR 9
3. Venicle Number	20. BL $\overset{\mathcal{O}}{=}$ 21. Roof $\overset{\mathcal{B}}{\mathcal{B}}$ 22. Other $\overset{\mathcal{S}}{=}$
INTEGRITY	<ul><li>(0) No glazing damage from impact forces</li><li>(2) Glazing in place and cracked from impact forces</li></ul>
4. Passenger Compartment Integrity  (00) No integrity loss	<ul><li>(3) Glazing in place and holed from impact forces</li><li>(4) Glazing out-of-place (cracked or not) and not holed from impact forces</li></ul>
Yes, Integrity Was Lost Through (01) Windshield (02) Door (side) (03) Door/hatch (rear)	<ul> <li>(5) Glazing out-of-place and holed from impact forces</li> <li>(6) Glazing disintegrated from impact forces</li> <li>(7) Glazing removed prior to accident</li> <li>(8) No glazing</li> <li>(9) Unknown if damaged</li> </ul>
(04) Roof (05) Roof glass	Glazing Damage from Occupant Contact
(06) Side window (07) Rear window (08) Roof and roof glass	23. WS $\stackrel{?}{=}$ 24. LF $\stackrel{?}{=}$ 25. RF $\stackrel{?}{=}$ 26. LR $\stackrel{?}{=}$ 27. RR $\stackrel{?}{=}$ 28. BL $\stackrel{?}{=}$ 29. Roof $\stackrel{?}{=}$ 30. Other $\stackrel{?}{=}$
(09) Windshield and door (side) (10) Windshield and roof	
(11) Side and rear window (98) Other combination of above (specify):	(0) No occupant contact to glazing or no glazing (1) Glazing contacted by occupant but no glazing damage
(99) Unknown	<ul><li>(2) Glazing in place and cracked by occupant contact</li><li>(3) Glazing in place and holed by occupant contact</li><li>(4) Glazing out-of-place (cracked or not) by occupant</li></ul>
Door, Tailgate Or Hatch Opening	contact and not holed by occupant contact (5) Glazing out-of-place by occupant contact and holed by occupant contact
5. LF 🗘 6. RF 🗘 7. LR 🔑 8. RR 🔑 9. TG/H 🔑	(6) Glazing disintegrated by occupant contact (9) Unknown if contacted by occupant
<ul><li>(0) No door/gate/hatch</li><li>(1) Door/gate/hatch remained closed and operational</li><li>(2) Door/gate/hatch came open during collision</li></ul>	If No Glazing Damage <b>And</b> No Occupant Contact or No Glazing, Then Code IV 31 Through IV 46 As Ø
<ul><li>(3) Door/gate/hatch jammed shut</li><li>(8) Other (specify):</li></ul>	Type of Window/Windshield Glazing
(a) II I	31. WS $\frac{1}{2}$ 32. LF $\frac{0}{2}$ 33. RF $\frac{0}{2}$ 34. LR $\frac{2}{2}$ 35. RR $\frac{0}{2}$
(9) Unknown	36. BL <u>0</u> 37. Roof <u>0</u> 38. Other <u>0</u>
Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then Code Ø.	<ul> <li>(0) No glazing contact and no damage, or no glazing</li> <li>(1) AS-1 — Laminated</li> <li>(2) AS-2 — Tempered</li> </ul>
10. LF $\frac{O}{O}$ 11. RF $\frac{O}{O}$ 12. LR $\frac{O}{O}$ 13. RR $\frac{O}{O}$ 14. TG/H $\frac{O}{O}$	<ul> <li>(3) AS-3 — Tempered-tinted</li> <li>(4) AS-14 — Glass/Plastic</li> <li>(8) Other (specify):</li> </ul>
(0) No door/gate/hatch or door not opened	(9) Unknown
Door, Tailgate, or Hatch Came Open During Collision (1) Door operational (no damage)	Window Precrash Glazing Status
(2) Latch/striker failure due to damage (3) Hinge failure due to damage	39.WS
(4) Door structure failure due to damage	
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage	44. BL $\stackrel{D}{=}$ 45. Roof $\stackrel{\mathcal{Q}}{=}$ 46. Other $\stackrel{\mathcal{Q}}{=}$
(6) Latch/striker and hinge failure due to damage	<ul><li>(0) No glazing contact and no damage, or no glazing</li><li>(1) Fixed</li></ul>
(8) Other failure (specify):	(2) Closed (3) Partially opened
(9) Unknown	(4) Fully opened (9) Unknown



LOCATION OF INTRUSION	INTRUDED COMPONENT	COMPARISION VALUE		INTRUDED VALUE	=	INTRUSION	DOMINANT CRUSH DIRECTION
21	19) SEAT BACK	6.0	_	17,0	=	11,0	2
23	19) " "	4.1	_	20.0	=	14.0	Z
22	19) u M	6.0	_	20.0	=	14.0	2
21	20) 4 4	0	_	4,5	=	4.5	2
5.2	20) 4 4	0	_	4.5	=	4.5	2
23	20) 4 4	0	_	4.5	=	4.5	2
]	24) CUSHION	8.0	_	11.5	=	3.5	1
13	Z4 "	8.0		8.0	=	- o	
<u> </u>	02) INS. LEFT	0	=	. 8		,8	2
			_		=		
			_		=		
			_		=		
			_		=		
			_		=		·
			_		=		!

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Document no more than the 15 most severe intrusions

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV 47-IV 86 blank.

				V OO DIATIK.
	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	472_3	<b>48.</b> 19	49	50
2nd	51	52	53	54
3rd	55	56	<b>57.</b> <u>3</u>	58
4th	59	60	61	62
5th	63	64	<b>65</b>	66
6th	6723	68	69	<b>70</b>
7th	71	72. 24	<b>73</b> . 2	74
8th	75	76	77	78
9th	79	80	81	82
10th	83	84	85	86

## LOCATION OF INTRUSION

Front Seat

- (11) Left
- (12) Middle
- (13) Right

Second Seat

- (21) Left
- (22) Middle
- (23) Right

Third Seat

- (31) Left
- (32) Middle
- (33) Right

Fourth Seat

- (41) Left
- (42) Middle
- (42) Niiduli
- (43) Right

(98) Other enclosed area (specify):

(99) Unknown

INTRUDING COMPONENT

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back (23) Fifth seat back
- (24) Seat cushion
- (25) Back panel or door surface
- (26) Other interior component (specify):
- (27) Side panel forward of the A-pillar
- (28) Side panel rear of the A-pillar

## **Exterior Components**

- (30) Hood
- (31) Outside surface of vehicle (specify):
- (32) Other exterior object in the environment (specify):
- (33) Unknown exterior object
- (98) Intrusion of unlisted component(s)
  - (specify): \_
- (99) Unknown

## MAGNITUDE OF INTRUSION

- $(1) \ge 1$  inch but < 3 inches
- $(2) \ge 3$  inches but < 6 inches
- (3)  $\geq$  6 inches but < 12 inches
- (4)  $\geq$  12 inches but < 18 inches
- $(5) \ge 18$  inches but < 24 inches
- $(6) \ge 24$  inches
- (9) Unknown

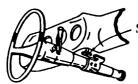
## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (9) Unknown



STEERING COLUMN COLLAPSE

Steering Column Shear Module Movement

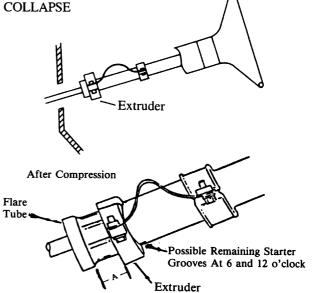


SHEAR CAPSULE



Right \_\_\_\_\_ V = \_\_\_\_\_\_,

Direction and Magnitude of Steering Column Movement

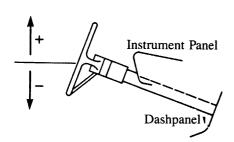


Compression = Measurement A

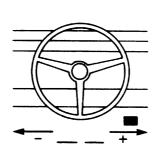
A =\_\_\_\_

## STEERING COLUMN MOVEMENT

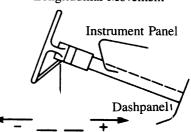
Vertical Movement



Lateral Movement



Longitudinal Movement

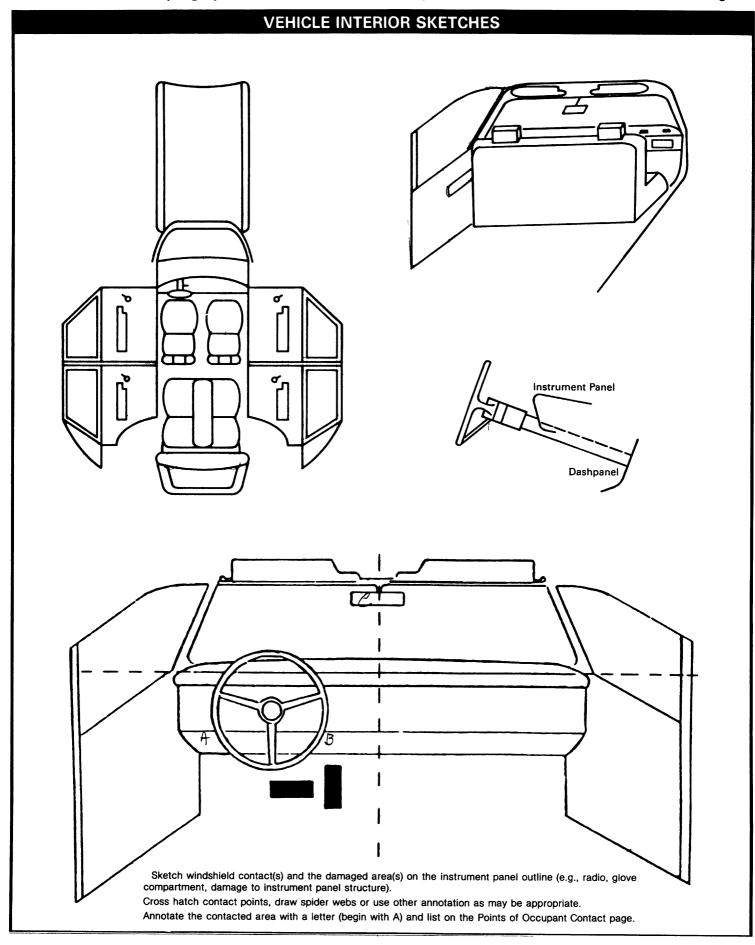


	COMPARISON VALUE	_	DAMAGED VALUE	=	MOVEMENT
VERTICAL		_		=	
LATERAL		_		=	
LONGITUDINAL	·	_		=	

## STEERING RIM/SPOKE DEFORMATION

COMPARISON VALUE	_	DAMAGED VALUE	=	DEFORMATION
	_		=	
			=	

#### STEERING COLUMN 92. Steering Rim/Spoke Deformation Code actual measured 87. Steering Column Type deformation to the nearest inch. (1) Fixed column (0) No steering rim deformation (2) Tilt column (1-5) Actual measured value (3) Telescoping column (6) 6 inches or more (4) Tilt and telescoping column (8) Observed deformation cannot be measured (8) Other column type (specify): (9) Unknown (9) Unknown 93. Location of Steering Rim/Spoke 00 Deformation If PDOF ≠ 11, 12 or 1, Then Code IV88-IV91 As 96 (00) No steering rim deformation 88. Steering Column Collapse Due to Occupant Loading Quarter Sections (01) Section A Code actual measured movement (02) Section B to the nearest inch. See coding manual (03) Section C for measurement technique(s). (04) Section D (00) No movement, compression, or collapse Half Sections (01-49) Actual measured value (05) Upper half of rim/spoke (50) 50 inches or greater (06) Lower half of rim/spoke Upper (07) Left half of rim/spoke Right Estimated movement from observation Lower (08) Right half of rim/spoke (81) Less than 1 inch $(82) \ge 1$ inch but < 2 inches $(83) \ge 2$ inches but < 4 inches (09) Complete steering wheel collapse (10) Undetermined location $(84) \ge 4$ inches but < 6 inches (99) Unknown $(85) \ge 6$ inches but < 8 inches (86) Greater than or equal to 8 inches **INSTRUMENT PANEL** (96) Not assessed (PDOF ≠ 11, 12, 1) 0 45,000 (97) Apparent movement, value 94. Odometer Reading 44634 miles - Code mileage to the undetermined or cannot be measured or estimated nearest 1,000 miles (98) Nonspecified type column (000) No odometer (99) Unknown (001) Less than 1,500 miles **Direction And Magnitude of Steering** (300) 299,500 miles or more (999) Unknown Column Movement Source: 89. Vertical Movement 95. Instrument Panel Damage from **Occupant Contact** 90. Lateral Movement (0) No (1) Yes (9) Unknown 91. Longitudinal Movement 96. Knee Bolsters Deformed from Code the actual measured movement **Occupant Contact** to the nearest inch. See Coding Manual (0) No. for measurement technique(s) (1) Yes (+00) No Steering column movement $(\pm 01 - \pm 49)$ Actual measured value (8) Not present (±50) 50 inches or greater (9) Unknown Estimated movement from observation 97. Did Glove Compartment Door Open $(\pm 81) \ge 1$ inch but < 3 inches During Collision(s) $(\pm 82) \ge 3$ inches but < 6 inches (0) No $(\pm 83) \ge 6$ inches but < 12 inches (1) Yes $(\pm 84) \ge 12$ inches (8) Not present . (\_\_96) Not assessed (PDOF ≠ 11, 12, 1) (9) Unknown $\pm$ 97) Apparent movement > 1 inch but cannot be measured or estimated \_99) Unknown



	, , , , , , , , , , , , , , , , , , ,			<b>,</b>			raye
		POINTS	OF OCCU	PANT CONTAC	CT		
			Body				Confidence
	Interior	Occupant	Region				Level of
	Component	No. If	lf	l	<b>-</b>	. =	Contact
Contact	Contacted	Known	Known			cal Evidence	Point
A	09	<del>  ',                                   </del>	L, KNEE	SMUDGES			2
В	10	<del>  ',</del>	RIKNEE				2
С	02	/	HEAD	BILDKEN	OFF		2
D				ļ			
E							
F							
G							
Н							
1							
J							
К						***************************************	
L							
М							
N	***************************************						
	1	CODE	E EOR INTERIO	I COMPONENTS			
(06) Steering codes 04 (07) Steering selector (08) Add on edge, air (09) Left instraction (11) Right instraction (12) Glove co (13) Knee bold (14) Windshie of the forpillar, instraction (15) Windshie of the folpillar, instraction (passeng	r wheel rim wheel hub/spoke wheel (combinatio and 05) column, transmiss lever, other attachn equipment (e.g., CB conditioner) rument panel and b estrument panel and empartment door	on of RIGHT Sion (30) nent 3, tape (31) (32) pelow (33) d below (34) below  (35) or more (36) ler, A- rror,or ide only) or more (37) ler, A- mirror  INTERIC (40) (41)	SIDE Right side interior excluding hardw Right side hardw Right A pillar Other right pillar Right side windone or more of the frame, window sor roof side rail Other right side	the following: sill, A-pillar, B-pillar, beject (specify):  or surface, vare or armrests vare or armrest  r (specify):  ow glass or frame ow glass including the following: sill, A-pillar, B-pillar, object (specify):	(49)  ROOF (50) (51) (52) (53) (54)  FLOOR (56) (57) (58) (59)  REAR (60) (61)	Child safety seat (specific controls including toe properties of convertible to c	(specify):  op  an inted icluding ing parking  ow) k, door, etc.
(20) Left side hardware (21) Left side (22) Left A pil (23) Left B pil		est (44) (45)	•			CONFIDENCE LEVE CONTACT POIN (1) Certain (2) Probable (3) Possible	
(25) Left side	window glass or fr		Interior loose ob	jects		(4) Unknown	٤

## **AUTOMATIC RESTRAINTS**

NOTES: Encode the data for each applicable front seat position. The attributes for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
F I R	Availability			
	Function			
S T	Failure			

Automatic (	(Passive)	Restraint	System	<b>Availability</b>
, raconnacio i	433176	HUSLIGHT	O 7 3 LC 1 1 1	AAAHADIIILA

- (0) Not equipped/not available
- (1) Airbag
- (2) Airbag disconnected (specify):
- (3) Airbag not reinstalled
- (4) 2 point automatic belts
- (5) 3 point automatic belts
- (6) Automatic belts destroyed or rendered inoperative
- (9) Unknown

## **Automatic (Passive) Restraint Function**

(0) Not equipped/not available

## **Automatic Belt**

- (1) Automatic belt in use
- (2) Automatic belt not in use
- (3) Automatic belt use unknown

## Air Bag

- (4) Airbag deployed during accident
- (5) Airbag deployed inadvertently just prior to accident
- (6) Deployed, accident sequence undetermined
- (7) Nondeployed
- (8) Unknown if deployed
- (9) Unknown

## **Did Automatic (Passive) Restraint Fail**

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_
- (9) Unknown

## MANUAL RESTRAINTS

NOTES: Encode the applicable data **for each seat position** in the vehicle. The attributes for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
F	Availability	4	0	4
Ŕ	Use	00	00	00
R S T	Failure Modes	0	0	0
S E	Availability	3	3	3
S O	Use	00	00	00
SECOZD	Failure Modes	O	0	0
T H	Availability			
	Use			
R D	Failure Modes			
O T	Availability		and the second s	
Η̈́	Use	The state of the s		
H E R	Failure Modes			

Manual (Active) Belt System Availability	(08) Other belt used (specify):
<ul> <li>(0) Not available</li> <li>(1) Belt removed/destroyed</li> <li>(2) Shoulder belt</li> <li>(3) Lap belt</li> <li>(4) Lap and shoulder belt</li> <li>(5) Belt available — type unknown</li> <li>(8) Other belt (specify):</li> </ul>	(12) Shoulder belt used with child safety seat (13) Lap belt used with child safety seat (14) Lap and shoulder belt used with child safety seat (15) Belt used with child safety seat — type unknown (18) Other belt used with child safety seat (specify):
(9) Unknown  Manual (Active) Belt System Use	(99) Unknown if belt used  Manual (Active) Belt Failure Modes During Accident  (0) No manual belt used or not available
(00) None used, not available, or belt removed/destroyed (01) Inoperative (specify):	<ul> <li>(1) No manual belt failure(s)</li> <li>(2) Manual belt failure(s) (encode all that apply above)</li> <li>[A] Torn webbing (stretched webbing not included)</li> <li>[B] Broken buckle or latchplate</li> <li>[C] Upper anchorage separated</li> <li>[D] Other achorage separated (specify):</li> </ul>
(02) Shoulder belt (03) Lap belt (04) Lap and shoulder belt (05) Belt used — type unknown	[E] Broken retractor [F] Other manual belt failure (specify):

(9) Unknown

	CHILD SAFETY SEA	T FIELD ASSESSMENT			
When a child safety seat is p below the occupant's number	resent enter the occupa using the codes listed be	ant's number in the first row and complete the column elow. Complete a column for each child safety seat present			
Occupant Number					
Type of Child     Safety Seat					
2. Child Safety Seat Orientation					
<ol><li>Child Safety Seat Harness Usage</li></ol>					
4. Child Safety Seat Shield Usage					
<ol><li>Child Safety Seat Tether Usage</li></ol>					
<ol><li>Child Safety Seat Make/Model</li></ol>	Spe	ecify Below for Each Child Safety Seat			
Type of Child Safety Seat  O No shild safety seat		3. Child Safety Seat Harness Usage			
<ul> <li>(0) No child safety seat</li> <li>(1) Infant seat</li> <li>(2) Toddler seat</li> <li>(3) Convertible seat</li> <li>(4) Booster seat</li> <li>(7) Other type child safety seat</li> </ul>	eat (specify):	<ul> <li>4. Child Safety Seat Shield Usage</li> <li>5. Child Safety Seat Tether Usage     Note: Options Below Are Used for Variables 3-5.     (00) No child safety seat</li> </ul>			
(8) Unknown child safety seat type (9) Unknown if child safety seat used 2. Child Safety Seat Orientation		Not Designed with Harness/Shield/Tether (01) After market harness/shield/tether added, not used (02) After market harness/shield/tether used (03) Child safety seat used, but no after market harness/shield/tether added			
<ul><li>(00) No child safety seat</li><li>Designed for Rear Facing for This Age/Weight</li><li>(01) Rear facing</li><li>(02) Forward facing</li><li>(03) Other orientation (specify):</li></ul>		(09) Unknown if harness/shield/tether added or used  Designed with Harness/Shield/Tether (11) Harness/shield/tether not used (12) Harness/shield/tether used (19) Unknown if harness/shield/tether used			
(04) Unknown orientation  Designed for Forward Facing for This Age/Weight (11) Rear facing (12) Forward facing (18) Other orientation (specify):		Unknown if Designed with Harness/Shield/Tether (21) Harness/shield/tether not used (22) Harness/shield/tether used (29) Unknown if harness/shield/tether used (99) Unknown if child safety seat used			
(19) Unknown orientation		6. Child Safety Seat Make/Model (Specify make/model and occupant number)			
Unknown Design or Orientation for This Age/ Weight, or Unknown Age/Weight (21) Rear facing (22) Forward facing (28) Other orientation (specify):					
(29) Unknown orientation					
(99) Unknown if child safety	seat used				

## **HEAD RESTRAINTS/SEAT EVALUATION**

NOTES: Encode the applicable data for each seat position in the vehicle. The attributes for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
F	Head Restraint Type/Damage	3	0	3
Ŕ	Seat Type	02	00	02
S T	Seat Performance	2C 9B	0	ZB
S E	Head Restraint Type/Damage	Q	0	0
SECOZD	Seat Type	03	03	-3
N D	Seat Performance	<b>2</b> G	26	26
T H	Head Restraint Type/Damage			
1	Seat Type			
R D	Seat Performance			
O T	Head Restraint Type/Damage			
Н	Seat Type			
E R	Seat Performance			

(5) Add-on - no damage (6) Add-on - damaged during accident

Head Restraint Type/Damage by Occupant at This

- (8) Other (specify): \_

- (9) Unknown

Seat Type	(This	Occupant	Position)
-----------	-------	----------	-----------

- (00) No seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., van type)
- (09) Other seat type (specify):
- (99) Unknown

## **Seat Performance (This Occupant Position)**

- (0) No seat
- (1) No seat performance failure(s)
- (2) Seat performance failure(s) (Encode all that apply)
  - [A] Seat adjusters failed
  - [B] Seat back folding locks failed
  - [C] Seat tracks failed
  - [D] Seat anchors failed
  - [E] Deformed by impact of passenger from rear
  - [F] Deformed by impact of passenger from front
  - [G] Deformed by own inertial forces
  - [H] Deformed by passenger compartment intrusion (specify):

[1]	Other (specify):	

(9) Unknown

DESCRIBE ANY INDICATION OF	ABNORMAL OCCUPANT POST	'URE (I.E. UNUSUAL OCCUPANT
CONTACT PATTERN)		

EJECTION/ENTRAPMENT DATA  Complete the following if the researcher has any indications that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.									
EJECTION No [ 1/2] Yes [ ] Describe indications of ejection and	body parts involved in partial ejection	(s):							
Occupant Number  Ejection  Ejection Area									
Ejection Medium									
Medium Status									
Ejection  (1) Complete ejection (2) Partial ejection (3) Ejection, unknown degree (9) Unknown  Ejection Area (1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear	(7) Roof (8) Other area (e.g., back of pickup, etc.) (specify):  (9) Unknown  Ejection Medium (1) Door/hatch/tailgate (2) Nonfixed roof structure (3) Fixed glazing (4) Nonfixed glazing (specify):	(5) Integral structure (8) Other medium (specify):  (9) Unknown  Medium Status (Immediately Prior to Impact) (1) Open (2) Closed (3) Integral structure (9) Unknown							
ENTRAPMENT No [ ) Yes [  Describe entrapment mechanism:	]								
Component(s):									
(Note in vehicle interior diagram)									

PSU NUMBER

CASE NUMBER

VEHICLE NUMBER

OCCUPANT NUMBER

OI

# OCCUPANT INJURY FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

[9	ENTIRE FORM	
[]	PAGE NUMBER (S)	



U.S. Department of Transportation

National Highway Traffic Safety Administration

## **UPDATE FORM**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

2. Case Number – Stratum	1. Primary Sampling Unit Number		45
0 2	, , ,	1_2	1 F
0. Yourisia (Yaurisa)			02
4. Occupant Number			01.

Address
Other Information:

RECEIVED

1989

(Sanitize this section prior to Update submission.)

		INJURY DATA CODED	ON INITIAL S	UBMISSIO	N	
	st 5 12nd 15 13rd 25 24th 35 35th 45 4	O.I.C. – A.I.S.	_	Injury Source	Direct/	
		Body System A.I.S. Region Aspect Lesion Organ Severi		Confidence Level	Indirect Injury	Occupant Area Intrusion No.
1st	5	6 7 8 9 10	11	12	13	. 14
2nd	15	16 17 18 19 20	21	22	23	
3rd	25	26 27 28 29 30	31	32	33	
4th	35	36 37 38 39 40	41	42	43	44
5th	45	46 47 48 49 50	51	52	53	_ 54
6th	55	56 57 58 59 60	61	62	63	_ 64
7th	65	66 67 68 69 70	71	72	73	_ 74
8th	75	76 77 78 79 80	81	82	83	_ 84
9th	85	86 87 88 89 90	91	92	93	_ 94
10th	95	96 97 98 99 100	101	. 102	103	_ 104
NOT	E. If noon	enery keep convert original Occupant In	iury form and si	uhmit as nart	of undat	· e

NOTE: If necessary, keep copy of original Occupant Injury form and submit as part of update.

		UPDA	TED CASE	INFORMATION
		INITIAL SUBMISSION	FNAL	
OA05. Occupa OA06. Occupa OA07. Occupa OA08. Occupa OA17. Manua	for Driver ant's Age ant's Sex ant's Height ant's Weight	96 37 15 140	96 37 5 5 4 4	OA35. Treatment - OA36. Type of Med (for Initial Ti OA37. Hospital Sta OA38. Working Da OA39. Time to Dea OA40. 1st Medical Cause of De
OA18. Manua System		00	00	OA41. 2nd Medica Cause of De
OA21. Autom Restrai Availat	nt System		<u></u>	OA42. 3rd Medical Cause of De OA43. Number of
OA22. Autom Restrai	atic (Passive) nt Function	0	<u>0</u>	ries for This

		INITIAL Submission	I PIUL
OA35.	Treatment - Mortality	4	
OA36.	Type of Medical Facility (for Initial Treatment)		· —
OA37.	Hospital Stay	00	_00
OA38.	Working Days Lost	99	99
OA39.	Time to Death	OP	00
OA40.	1st Medically Reported Cause of Death	00	00
OA41.	2nd Medically Reported Cause of Death	00	00
OA42.	3rd Medically Reported Cause of Death	00	
OA43.	Number of Recorded Injuries for This Occupant	97	02
		_	

## **INJURY DATA**

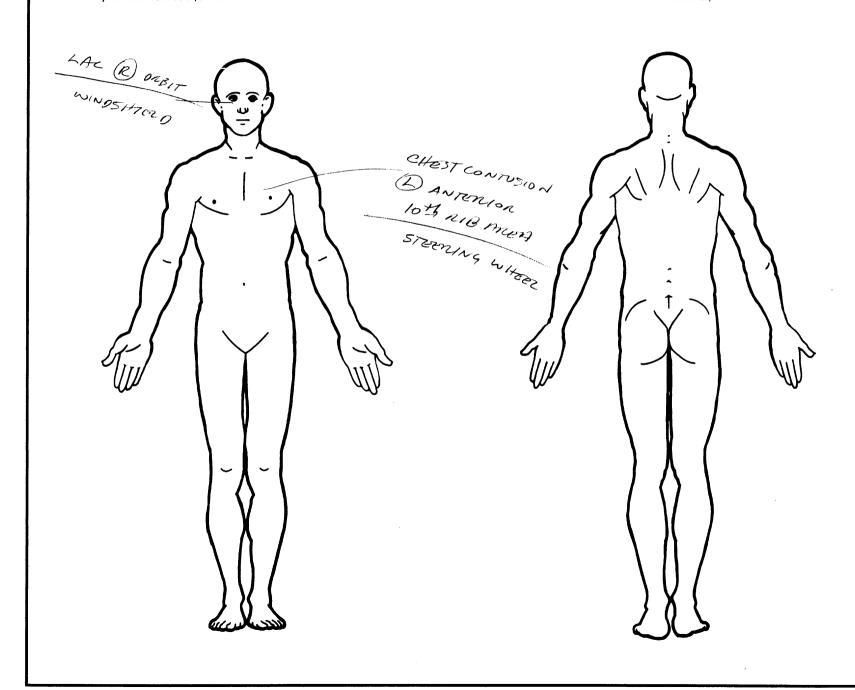
Record below the actual injuries sustained by this occupant that were identified from the unofficial and official sources prior to initial case submission **and from subsequently** acquired medical data. Remember not to double count an injury just because it was identified from two different sources.

	C-			O.I.C. – <i>i</i>	A.I.S.				Injury		
	Source of Injury Data	Body Region	Aspect	Lesio	Syste n Orga		_	Injury Source	Source Confidence Level		occupant Area
										,,	
1st	5. <u>3</u>	6. <u>F</u>	7	8	<u></u>	<u>I</u> 10.	11.	01	12. 3	13. 1	14. <u>0</u> <u>0</u>
2nd	15. 3	16. <u>C</u>	- 17. <u>-</u>	18.	<u></u>	<u>I</u> 20.	21.	04	<sub>22.</sub> <u>3</u>	23. 1 2	24. 0 >
3rd	-								32.	33 3	14. 00
4th	35. <u> </u>	36.	. 37. 🖳	38.	39.	<u></u> 40.	<u></u> 41.	$\overline{O}$	42. <u> </u>	43. 🗘 4	14. <u>50</u>
5th	45	46	47	<b>- 48</b>	49	50.	51.		52	53 5	54. <u> </u>
6th	55	56	57	_ 58	59	60.	61.		62	63 6	64. <u> </u>
7th	65	66	. 67	- 68	69	70.	71.		72	73 7	/4
8th	75	76	. 77	- 78. <b>-</b> -	79	80.	81.		82	83 8	14. <u> </u>
9th	85	86	. 87	. 88	89	90.	<b></b> 91.		92	93 9	94
10th	95	96	. 97	_ 98	99	100.	101.		102	103 10	4
11th	105	106	. 107	108	109	110.	111.		112	113 11	4
12th	115	116	. 117	_ 118	119	120.	121.		122	123 12	4
13th	125	126	. 127	. 128	129	130.	131.		132	133 13	4
14th	135	136	. 137	. 138	139	140.	141.		142	143 14	4
15th	145	146	. 147	. 148	149	150.	151.		152	153 15	4
16th	155	156	. 157	. 158	159	160.	161.		162	163 16	4
17th	165	166	. 167	. 168. <u> </u>	169	170.	171.		172	173 17	4
18th	175	176	. 177	. 178	179	180.	181.		182	183 18	4
19th	185	186	. 187	. 188	189	190.	191.		192	193 19	4
20th	195	196	. 197	. 198. <u> </u>	199	200.	201.		202	203 20	4

If greater than 20 injuries, code additional on Occupant Injury Data Supplement.

OCCUPANT INJURY DATA SUPPLEMENT											
	Source		C	D.I.C. — A.I	l.S.			Injury Source	Direct/		
	of Injury Data	Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Confidence Level	Indirect Injury	Occupant Area Intrusion No.	
21st				<del></del>					41		
22nd											
23rd								***************************************			
24th										Managardini manadandan	
25th						_					
26th				<del></del>							
27th				_							
28th					<del></del>						
29th											
30th						_					
31st									<del></del>		
32nd											
33rd	-										
34th						***************************************			-		
35th			-					***************************************			
36th							***************************************	***************************************	-		
37th											
38th											
39th								***************************************			
40th											
41st											
42nd					<del></del>						
43rd					-					<del></del>	
44th											
45th											

## OFFICIAL INJURY DATA - SOFT TISSUE INJURIES



## SOURCE OF INJURY DATA

#### **OFFICIAL**

- (1) Autopsy records with or without hospital medical records
- (2) Hospital medical records other than emergency room (eg. discharge summary)
- (3) Emergency room records only (including associated Xrays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

#### UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify):
- (9) Police

## **INJURY SOURCE**

#### FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add-on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify):

## LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify):
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail
- (27) Other left side object (specify):

#### RIGHT SIDE

- (30) Right side interior surface, excluding hardware or
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify):
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, roof side
- (37) Other right side object (specify):

#### INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify):
- (44) Head restraint system
- (45) Air cushion
- (46) Other occupants (specify):
- (47) Interior loose objects
- (48) Child safety seat (specify):
- (49) Other interior object (specify):

#### ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

## **FLOOR**

- (56) Floor including toe pan
- (57) Floor or console mounted transmission lever, including
- (58) Parking brake handle
- (59) Foot controls including parking brake

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify):

## EXTERIOR OF OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify):
- (68) Unknown exterior objects

## EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify):
- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify):
- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify):
- (83) Unknown exterior of other motor vehicle

## OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify)
- (86) Unknown vehicle or object

## NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify)
- (97) Injured, unknown source

## **INJURY SOURCE CONFIDENCE LEVEL**

- (1) Certain
- (2) Probable
- (3) Possible (9) Unknown

## DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## OCCUPANT INJURY CLASSIFICATION

## O.I.C. Body Region

- Abdomen
- Ankle-foot
- Arm (upper) (B) Back-thoracolumbar spine
- Chest
- (E) Elbow
- Face
- Forearm Head - skull
- Injured, unknown region
- (K) Leg (lower)
- Lower limb(s) (whole or unknown
- part)
- (N) Neck-cervical spine Pelvic - hip
- (S) Shoulder
- (T)
- Thigh (X)Upper limb(s) (whole or unknown
- part) (0)Whole body

(W) Wrist - hand

## Aspect of Injury

- Anterior front (A)
- Bilateral (rib fracture only).

Injured, unknown aspect

- (C) Central
- (1) Inferior - lower

(U)

- Posterior back (R) Right
- (S) Superior - upper (W) Whole region

## Lesion

- (A) Abrasion
- (M) Amputation
- (V) Avulsion (B) Burn
- (K) Concussion
- (C) Contusion (N) Crush

- Detachment, separation
- Dislocation
- (F) Fracture
- (Z) Fracture and dislocation
- (U) Injured, unknown lesion
- (L) Laceration
- (0)Other Perforation, puncture
- (R) Rupture
- (S) Sprain (T)Strain

## System/Organ

(E)

- (A)
- (B) Brain
- (E) Ears

(0)

- (H) Heart
- All systems in region Arteries - veins

Total severance, transection

(D) Digestive

Eve

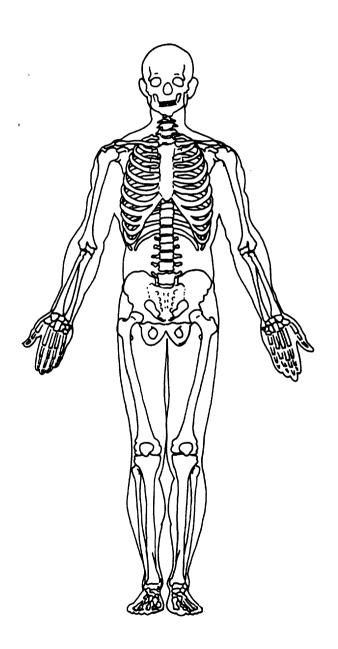
Injured, unknown system

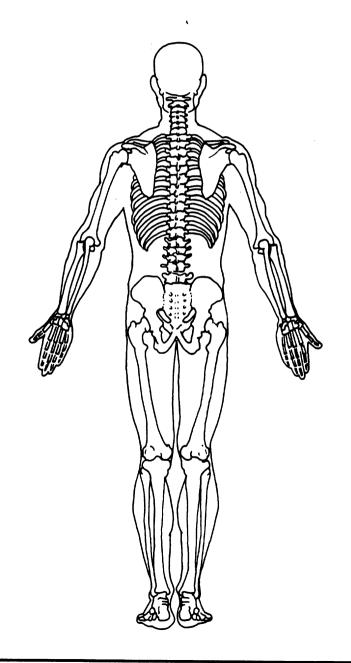
- Integumentary
- Joints (K) Kidneys
- (L) Liver Muscles (M)
- Nervous system
- Pulmonary lungs
- Respiratory (R) (S) Skeletal
- (C) Spinal cord (Q) Spleen
- Thyroid, other endocrine gland (T)
- (G) Urogenital Vertebrae

## **Abbreviated Injury Scale**

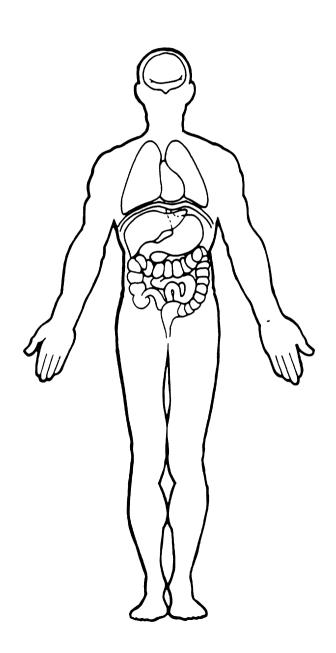
- Minor injury
- Moderate injury Serious injury
- (4) Severe injury
- (5) Critical injury (6) Maximum (untreatable)
- Injured, unknown severity

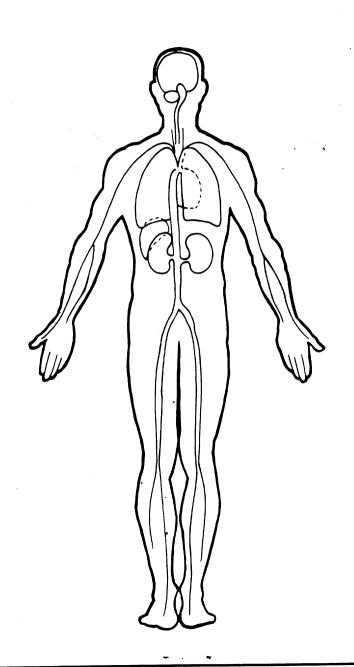
# OFFICIAL INJURY DATA - SKELETAL INJURIES





## OFFICIAL INJURY DATA-INTERNAL INJURIES



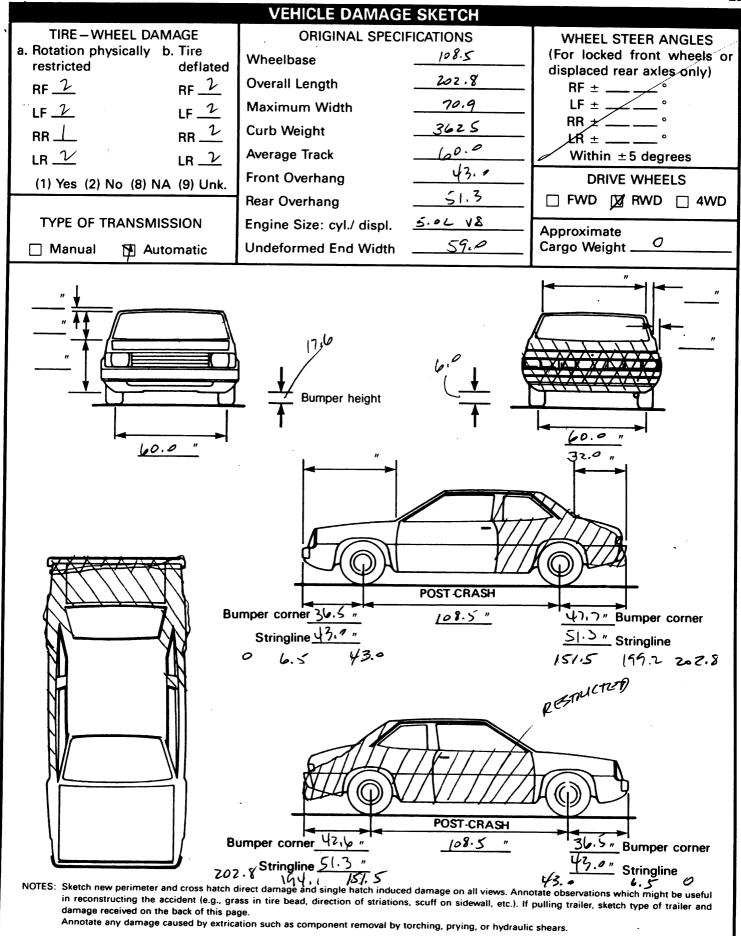




## **EXTERIOR VEHICLE FORM**

NATIONAL ACCIDENT SAMPLING SYSTEM

National High Administration	way Traffic Safety 1							CRASI	HWORTHI	NESS DA	TA SYSTEM
1. Primary	/ Sampling Unit Nur	mber	45	_ 3. V	ehicle N	lumber				_ (	23
2. Case Nu	umber – Stratum		2 / F	_ DENT	FICAT						
			VEHICLE I		IFICAI	ION				T	
	MRBP9		ZFY	and the second	and the same of the			l Year _			
Vehicle Ma	ke (specify):	VCOLN				le Mode	el (speci	fy):	MAR	K 7	
				CATO						_	
	e end of the damage r an undamaged axl			licle loi	ngitudin	al cente	er line o	r bump	er corne	er for er	nd
Specific Ir	mpact No.	Location	of Direct Da	mage				Location	n of Fiel	ld L	
	1 BEZINS	10.2 Fr	OM L.R.C	DRN E	R	ENT	nre 1	REVAR	PLANE	<u> </u>	
		•	CRUS	H PRO	OFILE						
1.9_ si	lentify the plane at v II, etc.) and label ad leasure and docume	justments (e	e.g., free spa	ace).				). 	bumpe S(	r, at sill,	, above
SISS M	leasure C1 to C6 fro npacts.		_						to front	in side	
Fr th	ree space value is de ne individual C locat de taper, etc. Record	ions. This m	nay include t	he foll	owing:	bumper	lead, b	umper 1 rush.	taper, si		
U	se as many lines/co	lumns as ne	ecessary to	describ	e each	damage	profile		AX		
Specific	Plane of	Direct [	Damage	Field							
Impact Number	C-Measurements	Width (CDC)	Max Crush	L	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	. C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	± D
	REAR BUMPER	10.2	8.9	59.1	3.6	3.8	<i>S</i> , 3	S.Y	6.6	8,7	Ø
!	FACE SPACE		.3		3.0	.7	١	•1	,7	3,0	0
(	CMEA		8.6		ما ،	3.1	5.2	5,5	5.9	5,7	٥
					*						



# **CDC WORKSHEET**

CODES FOR O	BJECT CONTACTED
01-30 – Vehicle Number  Noncollision (31) Overturn – rollover (32) Fire or explosion (33) Jackknife (34) Other intraunit damage (specify):	(57) Fence (58) Wall (59) Building (60) Ditch or Culvert (61) Ground (62) Fire hydrant (63) Curb
(35) Noncollision injury (38) Other noncollision (specify):	(64) Bridge (68) Other fixed object (specify):
(39) Noncollision – details unknown  Collision with Fixed Object (41) Tree (≤4 inches in diameter) (42) Tree (>4 inches in diameter) (43) Shrubbery or bush (44) Embankment	<ul> <li>(69) Unknown fixed object</li> <li>Collision With Nonfixed Object</li> <li>(71) Motor vehicle not in transport</li> <li>(72) Pedestrian</li> <li>(73) Cyclist or cycle</li> <li>(74) Other nonmotorist or conveyance (specify):</li> </ul>
<ul> <li>(45) Breakaway pole or post (any diameter)</li> <li>Nonbreakaway Pole or Post</li> <li>(50) Pole or post (≤4 inches in diameter)</li> <li>(51) Pole or post (&gt;4 but ≤12 inches in diameter)</li> <li>(52) Pole or post (&gt;12 inches in diameter)</li> <li>(53) Pole or post (diameter unknown)</li> </ul>	(75) Vehicle occupant (76) Animal (77) Train (78) Trailer, disconnected in transport (88) Other nonfixed object (specify):
<ul><li>(54) Concrete traffic barrier</li><li>(55) Impact attenuator</li><li>(56) Other traffic barrier (specify):</li></ul>	(98) Other event (specify):  (99) Unknown event or object

### **DEFORMATION CLASSIFICATION BY EVENT NUMBER**

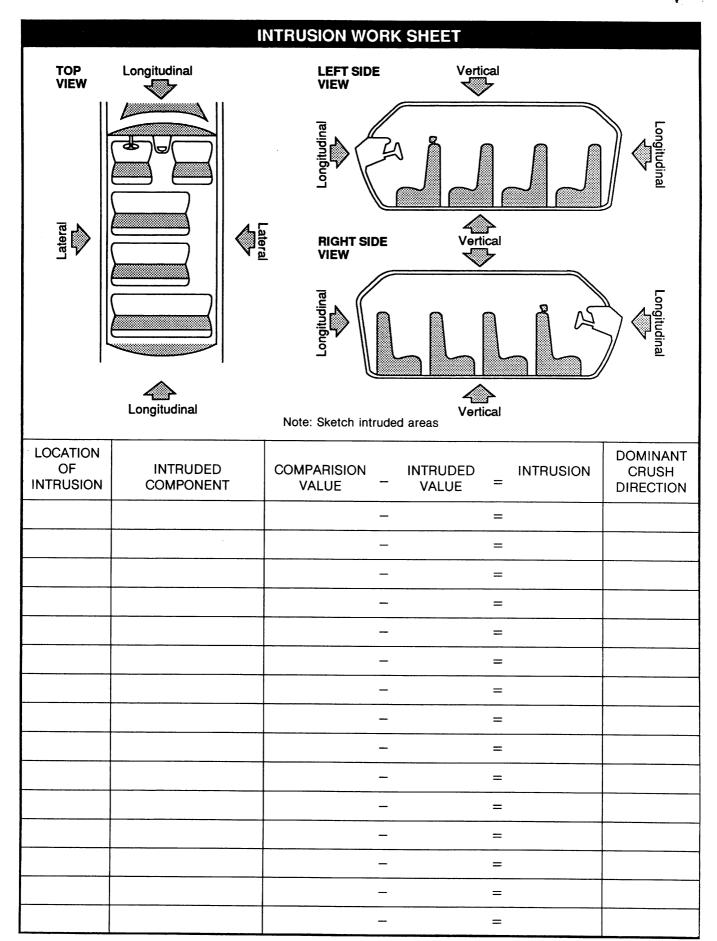
Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
02	02	180	00	<u>B</u>	D	E	W	02
				<del></del>				
<del></del>								
					-			



INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM

National Highway Traffic Safety Administration	CRASHWORTHINESS DATA SYSTE
	GLAZING
1. Primary Sampling Unit Number $45$	Glazing Damage from Impact Forces
2. Case Number – Stratum/_2_/_f	15. WS 🔑 16. LF 🔑 17. RF 🔑 18. LR 🔑 19. RR 으
3. Vehicle Number 03	20. BL ${\mathcal Q}$ 21. Roof ${\mathcal S}$ 22. Other ${\mathcal S}$
INTEGRITY	(0) No glazing damage from impact forces
4. Passenger Compartment Integrity	<ul><li>(2) Glazing in place and cracked from impact forces</li><li>(3) Glazing in place and holed from impact forces</li><li>(4) Glazing out-of-place (cracked or not) and not holed from</li></ul>
(00) No integrity loss	impact forces
Yes, Integrity Was Lost Through (01) Windshield (02) Door (side) (03) Door/hatch (rear) (04) Roof	<ul><li>(5) Glazing out-of-place and holed from impact forces</li><li>(6) Glazing disintegrated from impact forces</li><li>(7) Glazing removed prior to accident</li><li>(8) No glazing</li><li>(9) Unknown if damaged</li></ul>
(05) Roof glass	Glazing Damage from Occupant Contact
(06) Side window (07) Rear window (08) Roof and roof glass	23.WS <u>O</u> 24. LF <u>O</u> 25. RF <u>O</u> 26. LR <u>O</u> 27. RR <u>O</u>
(09) Windshield and door (side) (10) Windshield and roof	28. BL <u>O</u> 29. Roof <u>O</u> 30. Other <u>O</u>
(11) Side and rear window (98) Other combination of above (specify):	<ul><li>(0) No occupant contact to glazing or no glazing</li><li>(1) Glazing contacted by occupant but no glazing damage</li><li>(2) Glazing in place and cracked by occupant contact</li><li>(3) Glazing in place and holed by occupant contact</li></ul>
(99) Unknown	(4) Glazing out-of-place (cracked or not) by occupant
Door, Tailgate Or Hatch Opening	contact and not holed by occupant contact (5) Glazing out-of-place by occupant contact and holed by occupant contact
5. LF $\perp$ 6. RF $\stackrel{ extstyle 3}{ extstyle 3}$ 7. LR $\stackrel{ extstyle 0}{ extstyle 2}$ 8. RR $\stackrel{ extstyle 0}{ extstyle 2}$ 9. TG/H $\stackrel{ extstyle 0}{ extstyle 2}$	<ul><li>(6) Glazing disintegrated by occupant contact</li><li>(9) Unknown if contacted by occupant</li></ul>
(0) No door/gate/hatch (1) Door/gate/hatch remained closed and operational (2) Door/gate/hatch came open during collision	If No Glazing Damage <i>And</i> No Occupant Contact or No Glazing, Then Code IV 31 Through IV 46 As Ø
(3) Door/gate/hatch jammed shut (8) Other (specify):	Type of Window/Windshield Glazing
(0) Halana are	31. WS <u>0</u> 32. LF <u>0</u> 33. RF <u>0</u> 34. LR <u>0</u> 35. RR <u>0</u>
(9) Unknown	36. BL $\frac{\mathcal{O}}{}$ 37. Roof $\frac{\mathcal{O}}{}$ 38. Other $\frac{\mathcal{O}}{}$
Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then Code 0.  10. LF ○ 11. RF ○ 12. LR ○ 13. RR ○ 14. TG/H ○ (0) No door/gate/hatch or door not opened	(0) No glazing contact and no damage, or no glazing (1) AS-1 — Laminated (2) AS-2 — Tempered (3) AS-3 — Tempered-tinted (4) AS-14 — Glass/Plastic (8) Other (specify):
Door, Tailgate, or Hatch Came Open During Collision (1) Door operational (no damage)	(9) Unknown
(2) Latch/striker failure due to damage	Window Precrash Glazing Status
(3) Hinge failure due to damage (4) Door structure failure due to damage	39.WS $\frac{\mathcal{O}}{2}$ 40. LF $\frac{\mathcal{O}}{2}$ 41.RF $\frac{\mathcal{O}}{2}$ 42.LR $\frac{\mathcal{O}}{2}$ 43.RR $\frac{\mathcal{O}}{2}$
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage	44. BL <u>0</u> 45. Roof <u>0</u> 46. Other <u>0</u>
(6) Latch/striker and hinge failure due to	(0) No glazing contact and no damage, or no glazing
damage (8) Other failure (specify):	(1) Fixed (2) Closed (3) Partially opened
(9) Unknown	(4) Fully opened (9) Unknown



### **OCCUPANT AREA INTRUSION**

**Dominant** 

Note: If no intrusions, leave variables IV 47-IV 86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Crush Direction
1st	47	48	49	50
2nd	51	52	53	54
3rd	55	56	57	58
4th	59	60	61	62
5th	63	64	65	66
6th	67	68	69	70
7th	71	72	73	74
8th	75	76	77	78
9th	79	80	81	82
10th	83	84	85	86

### LOCATION OF INTRUSION

NONE

Front Seat

- (11) Left
- (12) Middle
- (13) Right

Second Seat

- (21) Left
- (22) Middle
- (23) Right

Third Seat

- (31) Left
- (32) Middle
- (33) Right

Fourth Seat

- (41) Left
- (42) Middle
- (43) Right
- (98) Other enclosed area (specify):
- (99) Unknown

INTRUDING COMPONENT

**Interior Components** 

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back (24) Seat cushion
- (25) Back panel or door surface
- (26) Other interior component (specify):
- (27) Side panel forward of the A-pillar
- (28) Side panel rear of the A-pillar

**Exterior Components** 

- (30) Hood
- (31) Outside surface of vehicle (specify):
- (32) Other exterior object in the environment (specify):
- (33) Unknown exterior object
- (98) Intrusion of unlisted component(s)

(specify): \_

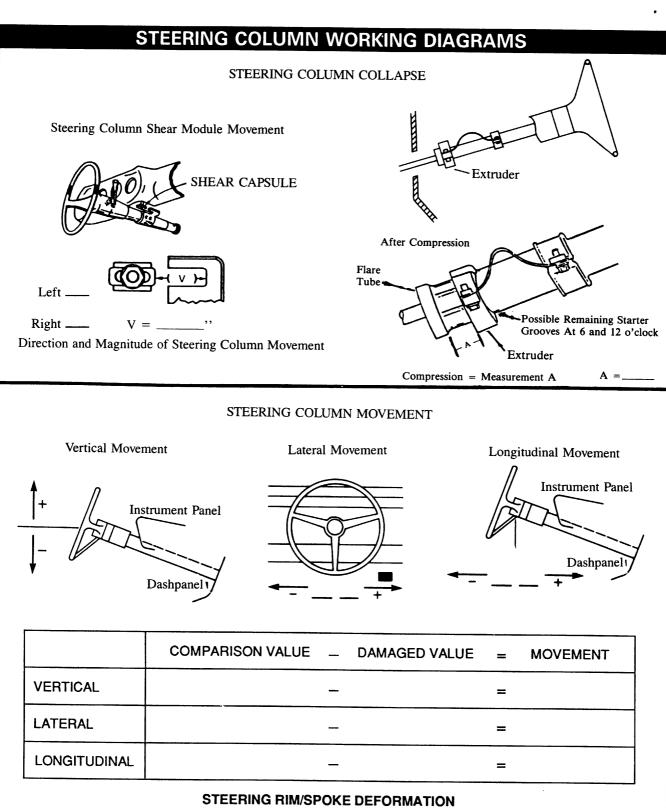
(99) Unknown

MAGNITUDE OF INTRUSION

- $(1) \ge 1$  inch but < 3 inches
- $(2) \ge 3$  inches but < 6 inches
- $(3) \ge 6$  inches but < 12 inches
- $(4) \ge 12$  inches but < 18 inches
- (5)  $\geq$  18 inches but < 24 inches
- $(6) \ge 24$  inches
- (9) Unknown

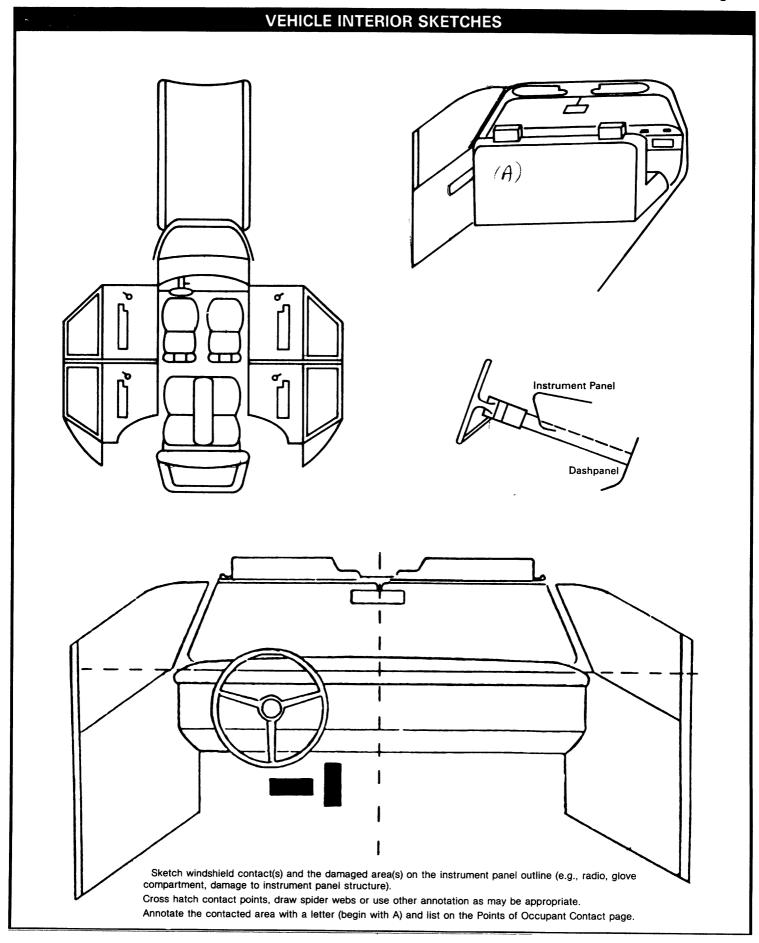
### DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (9) Unknown



COMPARISON VALUE	_	DAMAGED VALUE	=	DEFORMATION
	_		=	
			=	

### **STEERING COLUMN** 92. Steering Rim/Spoke Deformation Code actual measured 87. Steering Column Type deformation to the nearest inch. (1) Fixed column (0) No steering rim deformation (2) Tilt column (1-5) Actual measured value (3) Telescoping column (6) 6 inches or more (4) Tilt and telescoping column (8) Observed deformation cannot be measured (8) Other column type (specify): (9) Unknown (9) Unknown 93. Location of Steering Rim/Spoke Deformation If PDOF ≠ 11, 12 or 1, Then Code IV88-IV91 As 96 (00) No steering rim deformation 88. Steering Column Collapse Due to **Occupant Loading Quarter Sections** (01) Section A Code actual measured movement (02) Section B to the nearest inch. See coding manual (03) Section C for measurement technique(s). (04) Section D (00) No movement, compression, or collapse Half Sections (01-49) Actual measured value (05) Upper half of rim/spoke (50) 50 inches or greater (06) Lower half of rim/spoke Upper (07) Left half of rim/spoke Estimated movement from observation (08) Right half of rim/spoke (81) Less than 1 inch $(82) \ge 1$ inch but < 2 inches (09) Complete steering wheel collapse (83) $\geq$ 2 inches but < 4 inches (10) Undetermined location $(84) \ge 4$ inches but < 6 inches $(85) \ge 6$ inches but < 8 inches (99) Unknown (86) Greater than or equal to 8 inches **INSTRUMENT PANEL** (96) Not assessed (PDOF ≠ 11, 12, 1) 999000 (97) Apparent movement, value 94. Odometer Reading DIGITAL miles - Code mileage to the undetermined or cannot be measured or estimated nearest 1.000 miles (98) Nonspecified type column (000) No odometer (99) Unknown (001) Less than 1,500 miles (300) 299,500 miles or more **Direction And Magnitude of Steering** (999) Unknown... Column Movement Source: 89. Vertical Movement 95. Instrument Panel Damage from 0 **Occupant Contact** 90. Lateral Movement (0) No (1) Yes (9) Unknown 91. Longitudinal Movement 96. Knee Bolsters Deformed from Code the actual measured movement **Occupant Contact** to the nearest inch. See Coding Manual (0) No for measurement technique(s) (1) Yes (+00) No Steering column movement (8) Not present $(\pm 01 - \pm 49)$ Actual measured value (9) Unknown (±50) 50 inches or greater Estimated movement from observation 97. Did Glove Compartment Door Open $(\pm 81) \ge 1$ inch but < 3 inches During Collision(s) $(\pm 82) \ge 3$ inches but < 6 inches (0) No $(\pm 83) \ge 6$ inches but < 12 inches (1) Yes $(\pm 84) \ge 12$ inches (8) Not present (\_96) Not assessed (PDOF ≠ 11, 12, 1) (9) Unknown (\_\_97) Apparent movement > 1 inch but cannot be measured or estimated \_99) Unknown



vational Accident Sampling System - Crashworthiness Data System: Interior Vehicle Form Page								
		P	OINTS	OF OCCU	PANT CONTAC	CT		
Contact	Interior Component Contacted	Occuj No. Kno	If If		n Physic	al Evidence	Confidence Level of Contact Point	
A	40	3		KNEE	BENT SEA			2
В			<u>,                                     </u>	NVEC	BENT SET	pre		
С								
D								
E								
F								
G								
Н								
ı								
J								
К								
L								
М							···	
N								
	<u> </u>	L	CODE	S EOR INTERIO	R COMPONENTS			
FRONT  (01) Windshield (02) Mirror (03) Sunvisor (04) Steering wheel rim (05) Steering wheel hub/spoke (06) Steering wheel (combination of codes 04 and 05) (07) Steering column, transmission selector lever, other attachment (08) Add on equipment (e.g., CB, tape deck, air conditioner) (09) Left instrument panel and below (10) Center instrument panel and below (11) Right instrument panel and below (12) Glove compartment door (13) Knee bolster (14) Windshield including one or more of the following: front header, Apillar, instrument panel, mirror, or steering assembly (driver side only) (15) Windshield including one or more of the following: front header, Apillar, instrument panel, or mirror (passenger side only) (16) Other front object (specify):		oion nent 3, tape pelow d below below r more ler, A- rror,or ide only) r more ler, A- mirror	(26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail (27) Other left side object (specify):  RIGHT SIDE (30) Right side interior surface, excluding hardware or armrests (31) Right side hardware or armrest (32) Right A pillar (33) Right B pillar (34) Other right pillar (specify):  (35) Right side window glass or frame (36) Right side window glass including one or more of the following: frame, window sill, A-pillar, or roof side rail (37) Other right side object (specify):  INTERIOR (40) Seat, back support (41) Belt restraint webbing/buckle				Other interior object  Front header Rear header Roof left side rail Roof or convertible to  Floor including toe position of convertible to  Floor or console moutransmission lever, in console Parking brake handle Foot controls includir brake  Backlight (rear windo Backlight storage rac Other rear object (specific parks)	an unted icluding ing parking ow) k, door, etc.
hardwan (21) Left side (22) Left A pi (23) Left B pi (24) Other lef		est	(43) (44) (45) (46)	point	s (specify):		CONFIDENCE LEVE CONTACT POIN (1) Certain (2) Probable (3) Possible (4) Unknown	
(25) Left Side	Williadw glass of II	anie						٤

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-	₩.	88		I A.	17=		v			V=1	H N	

NOTES: Encode the data for each applicable front seat position. The attributes for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
F	Availability			
Ŕ	Function			
S T	Failure			

Automatic (Passive	Restraint Syste	m Availability
--------------------	-----------------	----------------

- (0) Not equipped/not available
- (1) Airbag
- (2) Airbag disconnected (specify):
- (3) Airbag not reinstalled
- (4) 2 point automatic belts
- (5) 3 point automatic belts
- (6) Automatic belts destroyed or rendered inoperative
- (9) Unknown

### **Automatic (Passive) Restraint Function**

(0) Not equipped/not available

### **Automatic Belt**

- (1) Automatic belt in use
- (2) Automatic belt not in use
- (3) Automatic belt use unknown

### Air Bag

- (4) Airbag deployed during accident
- (5) Airbag deployed inadvertently just
- prior to accident
  (6) Deployed, accident sequence undetermined
- (7) Nondeployed
- (8) Unknown if deployed
- (9) Unknown

### **Did Automatic (Passive) Restraint Fail**

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): .
- (9) Unknown

### **MANUAL RESTRAINTS**

NOTES: Encode the applicable data **for each seat position** in the vehicle. The attributes for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

	T			
		Left	Center	Right
F	Availability	4,	0	4
R S	Use	οψ	00	04
Ť	Failure Modes	/	0	/
OZOOmo	Availability	3	3	3
CO	Use	00	00	00
N D	Failure Modes	0	0	0
T H	Availability			
1 1	Use			
R D	Failure Modes			
O T	Availability			
Ė	Use			No.
H E R	Failure Modes			

Manual (Active) Belt System Availability	(08) Other belt used (specify):					
<ul> <li>(0) Not available</li> <li>(1) Belt removed/destroyed</li> <li>(2) Shoulder belt</li> <li>(3) Lap belt</li> <li>(4) Lap and shoulder belt</li> <li>(5) Belt available — type unknown</li> <li>(8) Other belt (specify):</li> </ul>	(12) Shoulder belt used with child safety seat (13) Lap belt used with child safety seat (14) Lap and shoulder belt used with child safety seat (15) Belt used with child safety seat — type unknown (18) Other belt used with child safety seat (specify):					
(9) Unknown	(99) Unknown if belt used					
Manual (Active) Belt System Use	Manual (Active) Belt Failure Modes During Accident					
<ul><li>(00) None used, not available, or belt removed/destroyed</li><li>(01) Inoperative (specify):</li></ul>	<ul> <li>(0) No manual belt used or not available</li> <li>(1) No manual belt failure(s)</li> <li>(2) Manual belt failure(s) (encode all that apply above)</li> <li>[A] Torn webbing (stretched webbing not included)</li> <li>[B] Broken buckle or latchplate</li> <li>[C] Upper anchorage separated</li> </ul>					
(02) Shoulder belt (03) Lap belt	[D] Other achorage separated (specify):					
(04) Lap and shoulder belt (05) Belt used — type unknown	[E] Broken retractor [F] Other manual belt failure (specify):					
	(9) Unknown					

When a child safety seat is p below the occupant's number	resent enter th using the codes	ne occupar s listed belo	nt's r ow. C	number in the complete a co	e first row an olumn for each	d complete the child safety se	e column eat present.			
Occupant Number										
Type of Child     Safety Seat										
Child Safety Seat     Orientation										
3. Child Safety Seat Harness Usage										
4. Child Safety Seat Shield Usage										
5. Child Safety Seat Tether Usage										
<ol><li>Child Safety Seat Make/Model</li></ol>		Spec	cify E	selow for Eac	ch Child Safet	y Seat				
(8) Unknown child safety so (9) Unknown if child safety  2. Child Safety Seat Orientation (00) No child safety seat Designed for Rear Facing for (01) Rear facing (02) Forward facing (03) Other orientation (special	(0) No child safety seat (1) Infant seat (2) Toddler seat (3) Convertible seat (4) Booster seat (7) Other type child safety seat (specify):  (8) Unknown child safety seat type (9) Unknown if child safety seat used (Child Safety Seat Orientation (00) No child safety seat Designed for Rear Facing for This Age/Weight (01) Rear facing				<ol> <li>Child Safety Seat Harness Usage</li> <li>Child Safety Seat Tether Usage</li> <li>Child Safety Seat Tether Usage         Note: Options Below Are Used for Variables 3-5.         (00) No child safety seat         Not Designed with Harness/Shield/Tether         (01) After market harness/shield/tether added, not used         (02) After market harness/shield/tether used         (03) Child safety seat used, but no after market harness/shield/tether added         (09) Unknown if harness/shield/tether         added or used         Designed with Harness/Shield/Tether         (11) Harness/shield/tether not used         (12) Harness/shield/tether used         (19) Unknown if harness/shield/tether used     </li> </ol>					
Designed for Forward Facin (11) Rear facing (12) Forward facing					Unknown if Designed with Harness/Shield/Tether (21) Harness/shield/tether not used (22) Harness/shield/tether used (29) Unknown if harness/shield/tether used (99) Unknown if child safety seat used  6. Child Safety Seat Make/Model					
(19) Unknown orientation			0.			d occupant nur	nber)			
Unknown Design or Orientation for This Age/ Weight, or Unknown Age/Weight (21) Rear facing (22) Forward facing (28) Other orientation (specify):										
(29) Unknown orientation										
(99) Unknown if child safety	seat used		1							

CHILD SAFETY SEAT FIELD ASSESSMENT

### **HEAD RESTRAINTS/SEAT EVALUATION**

NOTES: Encode the applicable data for **each seat position** in the vehicle. The attributes for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
F R	Head Restraint Type/Damage	3	9	3
	Seat Type	02	00	02
S T	Seat Performance	25	0	1
SE	Head Restraint Type/Damage	0	0	0
одоош Одоош	Seat Type	03	03	€ 0
	Seat Performance	1	1	1
T H	Head Restraint Type/Damage			
Ī	Seat Type			
R D	Seat Performance			
O T	Head Restraint Type/Damage			
H H	Seat Type			
E R	Seat Performance			

Seat Performance (This Occupant Position)
(0) No seat
(1) No seat performance failure(s)
(2) Seat performance failure(s)
(Encode all that apply)
[A] Cook adjustens falled
[A] Seat adjusters failed
[B] Seat back folding locks failed
[C] Seat tracks failed ——— [D] Seat anchors failed
ŒD Deformed by impact of passenger from rear [F] Deformed by impact of passenger from front
[G] Deformed by own inertial forces
[H] Deformed by passenger compartment intrusion (specify):
(ареспу).
[I] Other (specify):
(9) Unknown
(o) cincioni

		EJECTION	/ENTRAP	MENT DAT	Α			
Com	Complete the following if the researcher has any indications that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.							
	EJECTION No [X] Yes [ ] Describe indications of ejection and body parts involved in partial ejection(s):							
	Occupant Number							
	Ejection							
	Ejection Area							
	Ejection Medium							
	Medium Status							
Ejection  (1) Complete ejection (2) Partial ejection (3) Ejection, unknown degree (9) Unknown  Ejection Area (1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear  (7) Roof (8) Other area (e.g., back of pickup, etc.) (specify):  (9) Unknown  (9) Unknown  Ejection Medium (1) Door/hatch/tailgate (2) Nonfixed roof structure (3) Fixed glazing (4) Nonfixed glazing (specify): (5) Integral structur (8) Other medium ( (9) Unknown  (1) Open (2) Closed (3) Integral structur (9) Unknown  (1) Open (2) Closed (3) Integral structur (9) Unknown				um (specify):				
	RAPMENT No [X] Yes [	_						
	ponent(s):							
(Note	e in vehicle interior diagram)							

PSU NUMBER

CASE NUMBER

IAIF

VEHICLE NUMBER

OCCUPANT NUMBER

OI

# OCCUPANT INJURY FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

[9	ENTIRE FORM	
[]	PAGE NUMBER (S)	



### CRASHPC PROGRAM SUMMARY

Administration	CHASHFC FROC	SKAW SUMMARY	
Identifying Title	_		
<u>45</u> 1	2 1 F	01	8 9
	se No. – Stratum	Accident Event Date	(mm dd yy)
Sampling Unit		Sequence No.	(11111 00 777
CRASHPC Vehicle Identification	n .		
Vehicle 1	FORO	TORINO WAGO	~ /
Vehicle 2	Fono	TEMPO	
Year	Make	Model	NASS
	CENEDAL I		Veh. No.
	GENERAL II	NFORMATION	
VEHICLE '	1	VEHICLE 2	
Size	<u>4</u>	Size	2
Weight 3380 + 388 + 5	<u> </u>	Weight 2462 + 140 + 3	_ = 260 Z
Curb Occupant(s) Car	go	Curb Occupant(s) Cargo	
CDC2	FDEWZ		BDEWS
PDOF	000	PDOF	180
Stiffness	4	Stiffness	
	SCENE INF	FORMATION	
Rest and Impact Positions [			
•	No, <i>Go To Damage II</i>		
VEHICLE 1		VEHICLE 2	
Rest Position	•	Rest Position	
X		×	
Y		Υ	
PSI		PSI	
Impact Position		Impact Position	
X		×	
Υ		Y	
PSI		PSI	
Slip Angle		Slip Angle	
	VEHICLE	MOTION	
Sustained Contact [ ] No	Adams and		
	[ ] Yes		•
VEHICLE 1	s <del>da s</del> a ga	VEHICLE 2	. •
Skidding	[ ] No [ ] Yes	Skidding [	[ ] No [ ] Yes
Skidding Stop Before Rest	[ ] No [ ] Yes	Skidding Stop Before Rest [	[ ]No [ ]Yes
End-of-Skidding Position		End-of-Skidding Position	
X		X	
Υ		Υ	
PSI		PSI _	
Curved Path	[ ] No [ ] Yes		
Point on Path		Point on Path	JINO E JION
XY		X Y _	
Rotation Direction [ ] None	[ ]CW [ ]CCW		[]cw []ccw
Rotation > 360° [ ] No	[ ] Yes		[ ] Yes

FRICTION	N INFORMATION	TRAJECTO	DRY INFORMATION
Coefficient of Friction Rolling Resistance Op	<del>-</del>		No [ ] Yes
		Vehicle 1 Steer Angl	es
Vehicle 1 Rolling Re		LF	RF
LF LR		LR	RR
Ln	RR	Vehicle 2 Steer Angle	es
Vehicle 2 Rolling Re	esistance	LF	RF
	RF	LR	RR
LR		Terrain Boundary	[ ] No [ ] Yes
		First Point	
			Y
		Second Point	
		x	Y
			on Coefficient
	DAMAGE IN	IFORMATION .	
V	/EHICLE 1	,	VEHICLE 2
Damage Length	67	Damage Length	6/0
Crush Depths	C1	Crush Depths	C1 _ 2 5. 8
	c3 <u>18.5</u>		C3 <u> </u>
	C4 <u>Z1.5</u>		c4 <u>/3</u> . <u>4</u>
	cs <u>15.5</u>		C5 = 9.7
	C6 _ Z1 . S		c6 <b>5</b> . <b>3</b>
Damage Offset	±	Damage Offset	+ 000.00
IF THIS COMMON IM	IDACT WAS WITH A MOTOR VEHICLE	NOT IN TRANSPORT FILL	
THIS COMMON IN	IPACT WAS WITH A MOTOR VEHICLE	INOT IN TRAINSPORT, FILL II	N THE INFORMATION BELOW.
Model Year:	The	Weight, CDC, Scene Data	and Damage Information for
	this	vehicle should be recorded	
C	nd ATTACH the appropriate vehicle		

SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

CRASH3 RECONSTRUCTION

SPEED CHANGE TOTAL(MPH) LONG.(MPH) LAT.(MPH) ANG.(DEG)
(DAMAGE) VEH #1 20.7 -20.7 .0 .0

(DAMAGE) VEH #1 20.7 -20.7 .0 .0 VEH #2 30.0 30.0 .0 -180.0

ENERGY DISSIPATED BY DAMAGE VEH#1: 65641.2 FT-LB VEH#2: 69173.2 FT-LB

### SUMMARY OF DAMAGE DATA VEHICLE # 1

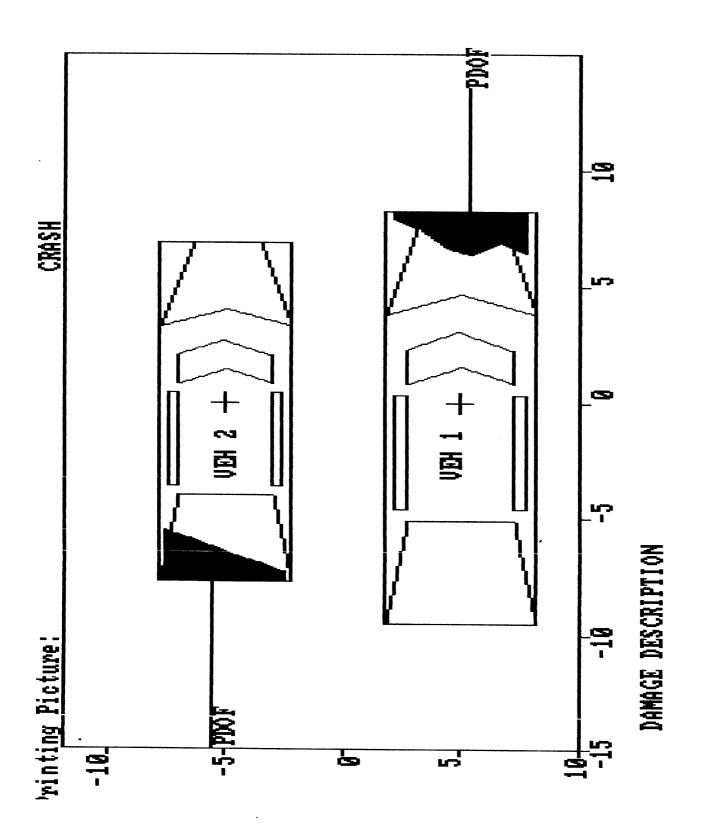
# (\* INDICATES DEFAUL T VALUE) VEHICLE # 2

TYPECA	TEGORY	4		
WEIGHT	3768.0	LBS.		
CDC126	FDEW2			
	67.0	IN.		
C1	4.0	IN.		
C2	8.5	IN.		
C:3	18.5	IN.		
C.4	21.5	IN.		
C:5	15.5	IN.		
C6	21.0	IN.		
D	. O			
RH0	1.00		*	
ANG	.0	DEG.		
D *	5.3	TN.		

TYPECA	TEGORY	2	
WEIGHT	2602.0	LBS.	
CDC061	BDEW5		
	61.0	IN.	
C: 1	25.8	IN.	
C.2	21.7	IN.	
C3	17.6	IN.	
C4	13.4	IN.	
C.5	9.7	IN.	
C6	5.3	IN.	
D	.0		
RH0	1.00		*
ANG	180.0	DEG.	
D,	-6.6	IN.	

### DIMENSIONS AND INERTIAL PROPERTIES

```
A1
                54.7
                           IN.
                                              Α2
                                                        ===
                                                              46.3
                                                                         IN.
B1
                59.2
                           IN.
                                              B2
                                                              50.1
                                                                         IN.
TR1
                61.8
                           IN.
                                              TR2
                                                              54.6
                                                        ===
                                                                         IN.
I 1
                 36651.3 LB-SEC**2-IN
                                              12
                                                               19964.9 LB-SEC**2-IN
M1
               9.797
                           LB-SEC**2/IN
                                             M2
                                                        ===
                                                             6.765
                                                                        LB-SEC**2/IN
XF1
                98.8
                           IN.
                                              XF2
                                                              83.3
                                                                         IN.
XR1
              -114.0
          ===
                           IN.
                                              XR2
                                                             -91.6
                                                                         IN.
YS1
                38.5
                           IN.
                                                              33.6
                                             YS2
                                                                         IN.
```





### CRASHPC PROGRAM SUMMARY

Administration Chashes						
Identifying Title		2	89			
<u>45</u>	2 1 F	02	89			
Primary Case Sampling Unit	No. – Stratum	Accident Event Date Sequence No.	e (mm dd yy)			
CRASHPC Vehicle Identification	_					
Vehicle 1 1987	FORD	TEMPO				
Vehicle 2	- UNCOL		3			
Year	Make	Model	NASS Veh. No.			
	GENERAL I	NFORMATION				
VEHICLE 1		VEHICLE :	2			
Size	2	Size	<u>3</u>			
Weight 2462 + 140+ 0	_= 2602	Weight 3625 + 390 + ==	= 4015			
Curb Occupant(s) Carg		Curb Occupant(s) Car	go			
CDC _12	FDEWI	CDC	BDEWZ			
PDOF	000	PDOF	180			
Stiffness	<u>9</u>	Stiffness	3			
	SCENE IN	FORMATION				
Rest and Impact Positions [	] No, Go To Damage	Information [ ] Yes				
VEHICLE 1		VEHICLE :	2			
Rest Position	•	Rest Position				
×		X				
Υ		Υ				
PSI		PSI				
Impact Position		Impact Position				
×		X	· •			
Υ		Υ	·			
PSI	<del></del>	PSI	· ·			
Slip Angle		Slip Angle				
	VEHICL	E MOTION				
Sustained Contact [ ] No	[ ] Yes					
VEHICLE 1		VEHICLE 2				
Skidding	[ ]No [ ]Yes	Skidding	[ ]No [ ]Yes			
Skidding Stop Before Rest	[ ] No [ ] Yes	Skidding Stop Before Rest	[ ]No [ ]Yes			
End-of-Skidding Position	[ ]140 [ ]163	End-of-Skidding Position	[ ]140 [ ]163			
X		X				
Ŷ		Y				
PSI		PSI				
Curved Path	[ ] No [ ] Yes	Curved Path	[ ] No [ ] Yes			
Point on Path	[ ] [ ]. <del></del>	Point on Path	( ) ( ) j			
X Y		X Y				
Rotation Direction [ ] None	[ ] cw [ ]ccw	Rotation Direction [ ] None	[]cw []ccw			
Rotation > 360° [ ] No	[ ] Yes	Rotation > 360° [ ] No	[ ] Yes.			

FRICTION INFORMATION	TRAJECTORY INFORMATION
Coefficient of Friction  Rolling Resistance Option	Trajectory Data [ ] No [ ] Yes  H No, Go To Damage Information
Vehicle 1 Rolling Resistance         LF RF         LR RR	l IR DD
Vehicle 2 Rolling Resistance  LF RF RF RR	
DAMAG	First Point  X Y
VEHICLE 1	
Damage Length	VEHICLE 2  Damage Length
Crush Depths $C1 = \frac{1}{5} \cdot \frac{6}{7} = \frac{1}{5} \cdot \frac{1}{7} = \frac{1}{5} \cdot \frac{1}{5} \cdot \frac{1}{5} = \frac{1}{5} \cdot \frac{1}{5} \cdot \frac{1}{5} = \frac{1}{5} = \frac{1}{5} \cdot \frac{1}{5} = \frac{1}{5$	Crush Depths  C1  C2 3  C3 5  C4 5
C6	C5 C6 7
Damage Offset ± 0000	Damage Offset ±
Damage Offset ±	CLE NOT IN TRANSPORT, FILL IN THE INFORMATION BELOW.
IF THIS COMMON IMPACT WAS WITH A MOTOR VEHIC	Damage Offset

SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

CRASH3 RECONSTRUCTION

SPEED CHANGE TOTAL (MPH) LONG. (MPH) LAT. (MPH) ANG. (DEG)

(DAMAGE) VEH #1 16.9 -16.9 .0 .0 .0 VEH #2 11.0 11.0 .0 -180.0

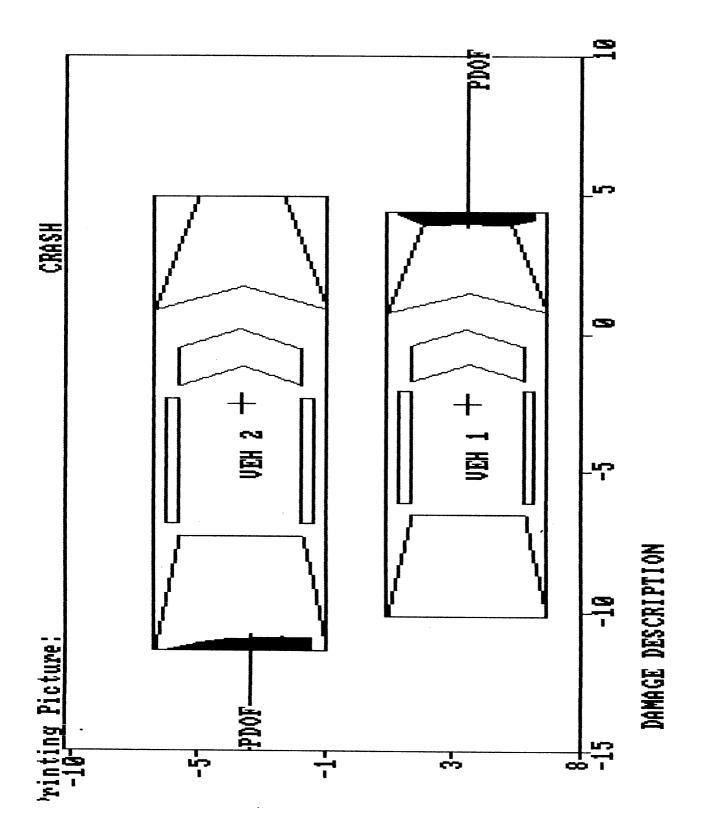
ENERGY DISSIPATED BY DAMAGE VEH#1: 20022.2 FT-LB VEH#2: 21206.0 FT-LB

### SUMMARY OF DAMAGE DATA VEHICLE # 1

# (\* INDICATES DEFAUL T VALUE) VEHICLE # 2

TYPECATEGO	RY 2	TYPECAT	EGORY 3
WEIGHT 260:	2.0 LBS.	WEIGHT	4015.0 LBS.
CDC12FDEW	1	CDC06E	BDEW2
L 57	O IN.	L	59.0 IN.
C:1 1	.6 IN.	C:1	.6 IN.
C2	.7 IN.	C2	3.1 IN.
C35	5.4 IN.	<u></u>	5.2 IN.
C45	.5 IN.	C4	5.5 IN.
C55	.8 IN.	C5	5.9 IN.
C6 3	.8 IN.	C6	5.7 IN.
D	.0	D	.0
RHO 1.	00 *	RH0	1.00
ANG	.O DEG.	ANG	180.0 DEG.
D,	.2 IN.	D,	5.1 IN.

A1	===	46.3	IN.	A2	===	51.3	IN.
B1	===	50.1	IN.	B2	===	55.5	IN.
TR1	==	54.6	IN.	TR2	***	58.9	IN.
I 1	****	19964.9	LB-SEC**2-IN	12	==	34700.6	LB-SEC**2-IN
Mi	===	6.765	LB-SEC**2/IN	M2	===	10.439	LB-SEC**2/IN
XF1		83.3	IN.	XF2	===	89.8	IN.
XR1	===	-91.6	IN.	XR2	****	-106.4	IN.
YS1	==	33.6	IN.	YS2	****	36.3	IN.



```
GG0181
            If ALCOHOL/DRUG PRESENCE GV11 equals 0 or 2, then ALCOHOL TEST
  GG0182
            GV12 should not equal 05-49.
            If ALCOHOL TEST GV12 equals 05-49, then ALCOHOL/DRUG PRESENCE
  GG0191
  GG0192
            GV11 should equal 1, 3 or 4.
45121F00000011
                 B92.1310000000000319050000002
                                                               189
45121F00010012
                 192.1310000000000104F0202B
45121F00020012
                 92.1310000000000202F0303B
45121F01000021
                  2.13 000000000711201006F1A42H1584
                                                       19909645042010202034
0000000000000121-21 000656410
45121F01000031
                  2.13 000000000010212FDEW02
                                                     060040919221621 000
               011140
45121F01000041
                  2.13 0000000001111100000020000088200000001000000010000000
45121F01000042
                  2.13 000000000
             100 00 00 00000091180
45121F01010051
                  2.13 0000000066174201111000000300000003031000000000001410
0970000000005
45121F01010161
                  2.13 0000000003FSCI1013100
45121F01010261
                  2.13 0000000003KRLI1101100
45121F01010361
                  2.13 0000000003KLCI1091100
45121F01010461
                  2.13 0000000003RLLI1043100
45121F01010561
                  2.13
                       0000000003RLAI1043100
45121F01020051
                  2.13 0000000070266187213000000300000003031000000000001410
0970000000005
45121F01020161
                  2.13 0000000003FSCI1011100
45121F01020261
                  2.13 0000000003KRCI1111100
45121F01020361
                  2.13 0000000003KLCI1101100
45121F01020461
                  2.13 0000000003KRAI1111100
45121F01020561
                  2.13 0000000003KLAI1101100
45121F02000021
                  2.13 0000020008712015021FABP338XHK
00000000000000130+30 000692210
                  2.13 00000000010106BDEW05020312FDEW01061262218131005 000057
45121F02000031
020605060604 000010999
45121F02000041
                  2.13 0000000006110000000020060088200000001002000010010000
45121F02000042
                  2.13 000000000231942221942211932212022222022232022112421
             196 96 96 96000045180
45121F02010051
                  2.13 00000000037165140111000000400000003022000000000001410
0990000000003
45121F02010161
                  2.13 0000000003FRLI1013100
45121F02010261
                  2.13 0000000003CLCI1043100
45121F02010361
                  2.13 0000000003FRL01013100
45121F03000021
                  2.13 0000000008513002021MRBP98F2FY
                                                      *19909645019810303036
00000000350000111+11 000212110
45121F03000031
                  2.13 000000000020206BDEW02
                                                     059010305060606 000
              011085
45121F03000041
                  45121F03000042
                  2.13 000000000
             196 96 96 96000999080
45121F03010051
                  2.13 000000000351741951110000004041100053022000000000000000
000000000000
45121F03020051
                  2.13 00000000312681252130000004041100053021000000000000000
000000000000
45121F03030051
                  2.13 0000000007248070221000000300000000031000000000000000
0970000000000
00000000
```

00000000000000

GH0031 GH0032 GH0033 GH0034		VEH NUM = 01 OCCUPANT NUM = 01 VEH NUM = 01 OCCUPANT NUM = 02 If BODY TYPE GV07 equals 01-06 and MODEL YEAR GV04 is greater than 67 but not 99 and OCCUPANT POSITION OA10 equals 11 or 13 and PASSIVE AVAILABILITY OA21 does not equal 4, then MANUAL BELT AVAILABILITY OA17 should equal 4, 5, 8 or 9. VEH NUM = 01 OCCUPANT NUM = 01
GH0031 GH0032 GH0033 GH0034		If BODY TYPE GV07 equals 01-06 and MODEL YEAR GV04 is greater than 67 but not 99 and OCCUPANT POSITION OA10 equals 11 or 13 and PASSIVE AVAILABILITY OA21 does not equal 4, then MANUAL BELT AVAILABILITY OA17 should equal 4, 5, 8 or 9.  VEH NUM = 01 OCCUPANT NUM = 02
GT0011 GT0012 GT0013	2	If TOTAL DELTA V GV30 is greater than or equal to 30, and less than 99, then at least one A.I.S. SEVERITY OI10(n) should be greater than or equal to 2. VEH NUM = $02$

### 1989 NATIONAL ACCIDENT SAMPLING SYSTEM

### ERROR SUMMARY SCREEN



CURRENT VERSION: 2.13

FORM NAME	NUMBER OF DOLLAR SIGNS	NUMBER OF LEVEL 1 ERRORS	NUMBER OF LEVEL 2 ERRORS	VERSION NUMBER CONSISTENT
Accident	0	<b>f</b> ":	, ,	· ·
General Vehicle	Ö	Ŏ	2	, V
Vehicle Exterior	Ö	Ō	ō	Ý
Vehicle Interior	0	O	Ō	Ý
Occupant Assessment	0	Q	O	Ϋ́
Occupant Injury	O	0	0	Y
Total Inter Errors		0	3	
Total Case Errors	Ō	0	5	

### **SLIDE INDEX**

Primary	Sampling L	Init Number <sub>-</sub>	45 Case Number - Stratum 12 1 F
Slide No.	Vehicle No.	Direction of Picture	Description of Slide Subject Matter
1-8	123	No	PATH OF VI VZ EV3
9-15	123	50	LOOKING BACK
16-31	1	OXT	OAMAGETOVI
32-42	. 1	INT	INTERIORVI
43-59		CXT	DAMAGE TO V2
60-70	2	127	INTERIOR OF V2
71-81	3	KYT	DAMAGE TO 13
82-92	3	INT	INTERNIOR OF 13
		,	
			,

Slide No.	Vehicle No.	Direction of Picture	Description of Slide Subject Matter
			·
		-	













































21F (1989) 4





5-121F (1989) #24 Best Available











zir (1969)#z



vollable



























15-121F (1989)#4 Best Available





st Available



21F (1989)#4



1F(1989)#47



21F (1989)#4





IF (1909) #0



F (1989)#51







21F (1989) i Available

















21F (1969)#6











F (1989) #67











Available















eilable

























